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INFORMATION REPORT

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CENTRAL INTELLIGENCE AGENCY

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REPORT

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SUBJECT **Peiding Electron Tube**DATE DISTR. **14 May 1959**NO. PAGES **3**

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REQUIREMENT

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DATE OF INFO.

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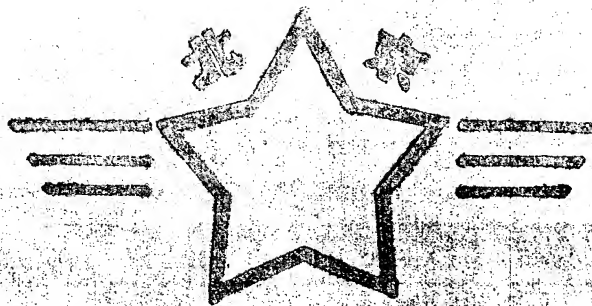
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PEKING
ELECTRON TUBES

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P R E F A C E

In order to satisfy the requirements of the large-scale economic construction throughout our country and the needs of the people's daily-growing living standard, the modern Peking Electron Tube Facotry has been built and put into operation with the technical assistance of the Soviet Union.

The stock products of our factory are mainly tubes of Soviet selested types with excellent characteristics. In the course of manufacture all the tubes have to go through strict controlling processes; excellent quality and long service period are thus guaranteed. They have earned much praise from all the customers who have used them.

The products of our factory can meet the requirements of different industrial branches. We hope you would place your orders at our factory. All kinds of samples for trials are at your disposal upon request.

TYPE NUMBERING SYSTEM

The PEKING type electron tubes are indicated according to a type numbering system, which provides information concerning electrical data, uses and constructional characteristics of the tube. This system is in general use on the U.S.S.R.

RECEIVING AND AMPLIFYING TUBES

The type numbers for receiving and amplifying tube consists of the four following symbols:

FIRST SYMBOL: Rating of Filament or Heater

- 1 — 1.2 volt filament
- 2 — 2.2 volt to 2.5 volt filament or heater
- 4 — 4.2 volt filament or heater
- 6 — 6.3 volt heater

SECOND SYMBOL: Electrode System

- A — Heptode
- B — Diode — Pentode
- Ж — Sharp-cutoff Pentode
- K — Remote-cutoff Pentode
- H — Twin Triode
- Π — Beam Tetrode or Output Pentode
- C — Triode
- X — Twin Diode
- Ц — Half-wave or Full-wave Rectifier
- Э — Tetrode
- E — Tuning Indicator

THIRD SYMBOL:

The third symbol is a figure indicating the ordinal of the tube type.

FOURTH SYMBOL: Constructional Characteristics

- C — Glass envelope with octal base
- Л — Glass envelope with loctal base
- П — Miniature type (7-pin or 9-pin base)

Examples

1A2Π	1 1.2 volt Filament	A Heptode	2 2nd type	Π Miniature 7-pin
6H1Π	6 6.3 volt Heater	H Twin Triode	I 1st type	Π Miniature 9-pin
4Π1Л	4 4.2 volt Filament	Π Output Pentode	I 1st type	Л Loctal base

TRANSMITTING TUBES

FIRST SYMBOL:

- Γ — Transmitting or power amplifier triode
- ΓY — Short-wave transmitting tube
- BΓ — Gas-filled rectifier

SECOND SYMBOL:

Two or three figures indicating the ordinal of the tube type.

THYRATRON

FIRST SYMBOL:

- TP — Thyatron

SECOND SYMBOL:

Fraction — The number of numerator is indicating average value of anode current in amperes, and the denominator is indicating peak inverse anode voltage in kilo-volts.

LIST OF SYMBOLS FOR ELECTRODES

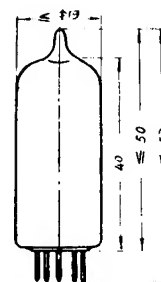
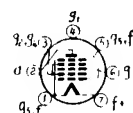
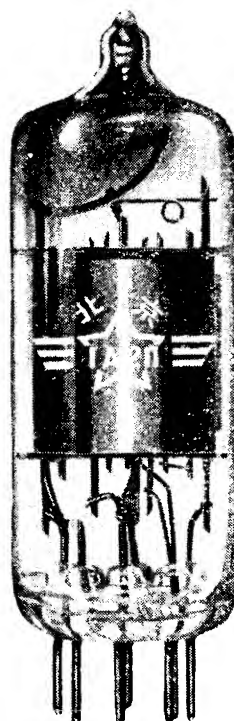
- a — Anode
- k — Cathode
- g — Grid (g_1 — Grid No. 1, g_2 — Grid No. 2, etc.)
- h — Heater
- f — Filament
- f_+ — Filament positive
- f_- — Filament negative
- is — Internal shield
- t — Fluorescent screen or Target
- NC — No connection to pin

HEPTODE

1A2Π

DESCRIPTION

The miniature tube PEKING 1A2Π is a heptode with directly heated oxide filament designed for use as a mixer-oscillator in battery operated receivers, and having a low filament and h.t. consumption.



FILAMENT

Filament voltage	V_f	1.2	V
Filament current	I_f	30	mA

OPERATING CHARACTERISTICS

Anode voltage	V_a	60	V
Grids No. 2 & No. 4 voltage	$V_{g_2 + g_4}$	45	V
Grid No. 3 voltage	V_{g_3}	0	V
Grid No. 1 circuit resistance	R_{g_1}	51	K
R.M.S. grid No. 1 voltage	$V_{g_1 \sim}$	8	V
Anode current	I_a	0.7	mA
Grids No. 2 & No. 4 current	$I_{g_2 + g_4}$	1.1	mA
Grid No. 1 current	I_{g_1}	130	μA
Conversion transconductance	S_c	0.24	mA/V
Oscillation transconductance	S_o	0.82	mA/V

PEKING ELECTRON TUBES



1A2Π

HEPTODE

MAXIMUM RATINGS

Filament voltage	V_f	0.9—1.4	V
Anode voltage	$V_a \text{ max}$	90	V
Grids No. 2 & No. 4 voltage	$V_{g_2 + g_4 \text{ max}}$	75	V
Cathode current	$I_k \text{ max}$	3	mA
Anode dissipation	$W_a \text{ max}$	0.3	W

CAPACITANCES

Signal input	$C_i (g_3)$	5.1	pF
Mixer output	C_o	6.3	pF
Oscillator input	$C_i (g_1)$	0.95	pF
Oscillator output	$C_o (g_2 + g_4)$	7.3	pF
Grid No. 3 to anode	$C_{g_3/a}$	<0.6	pF
Grid No. 1 to Grid No. 3	C_{g_1/g_3}	0.14	pF

Base: Miniature 7 pin

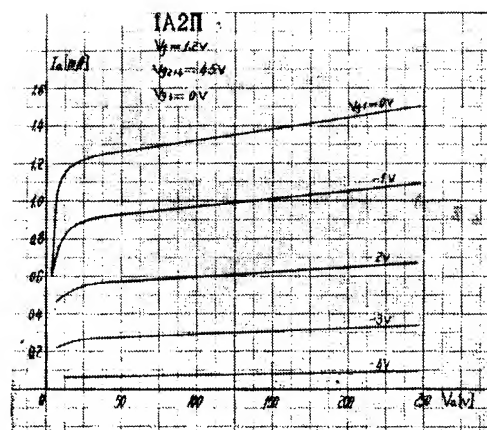
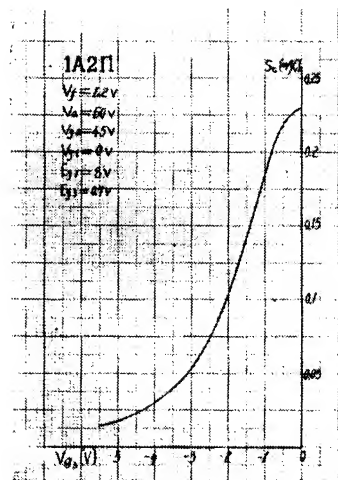
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Mounting: Any

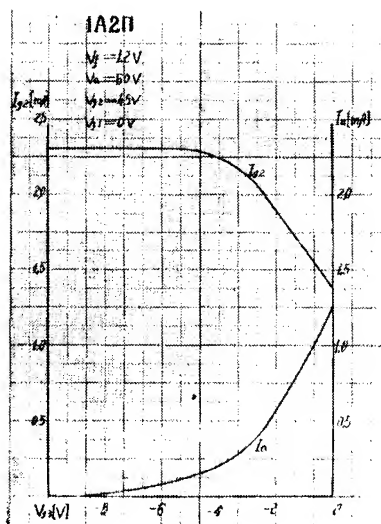
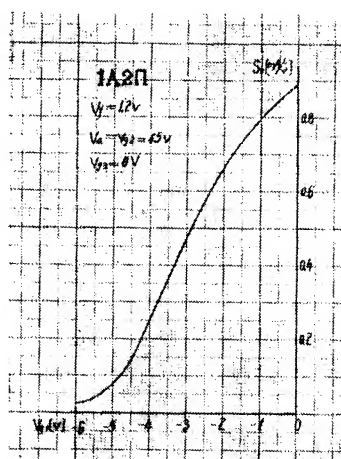


PEKING ELECTRON TUBES

1A2Π



1A2Π

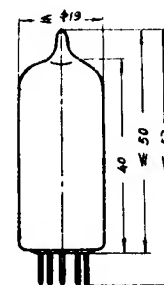
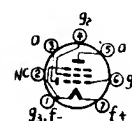
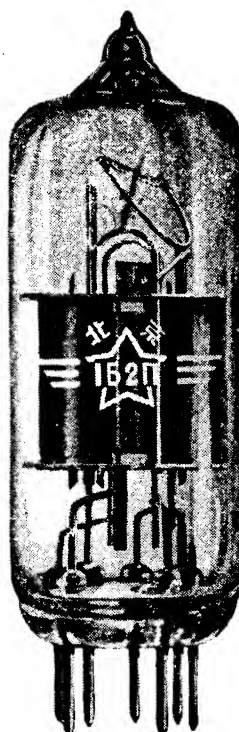


DIODE-PENTODE

1Б2П

DESCRIPTION

The miniature tube PEKING 1Б2П is a diode-pentode with directly heated oxide filament designed for use as a detector and a.f. amplifier in battery operated receives, and having a low filament and h.t. consumption.



FILAMENT

Filament voltage	V_f	1.2	V
Filament current	I_f	30	mA

CHARACTERISTICS

Pentode section

Anode voltage	V_a	60	V
Grid No. 2 voltage	V_{g_2}	45	V
Grid No. 1 voltage	V_{g_1}	0	V
Anode current	I_a	0.9	mA
Grid No. 2 current	I_{g_2}	0.18	mA
Transconductance	S	0.55	mA/V
Internal resistance	R_i	1	MΩ

Diode section

Anode voltage	V_d	1.2	V
Anode Load resistor	R_l	1	K
Anode current	I_d	≥ 7	μA

PEKING ELECTRON TUBES



1Б2П

DIODE-PENTODE

MAXIMUM RATINGS

Filament voltage	V_f	0.9—1.4	V
Anode voltage	$V_a \text{ max}$	90	V
Grid No. 2 voltage	$V_{g_2} \text{ max}$	75	V
Cathode current	$I_k \text{ max}$	2	mA
Anode dissipation	$W_a \text{ max}$	0.15	W

CAPACITANCES

Pentode section

Input	C_i	1.85	pF
Output	C_o	2.1	pF
Grid No. 1 to anode	$C_{g_1/a}$	0.27	pF

Diode section

Anode to cathode	$C_{a/k}$	0.3	pF
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Base: Miniature 7 pin

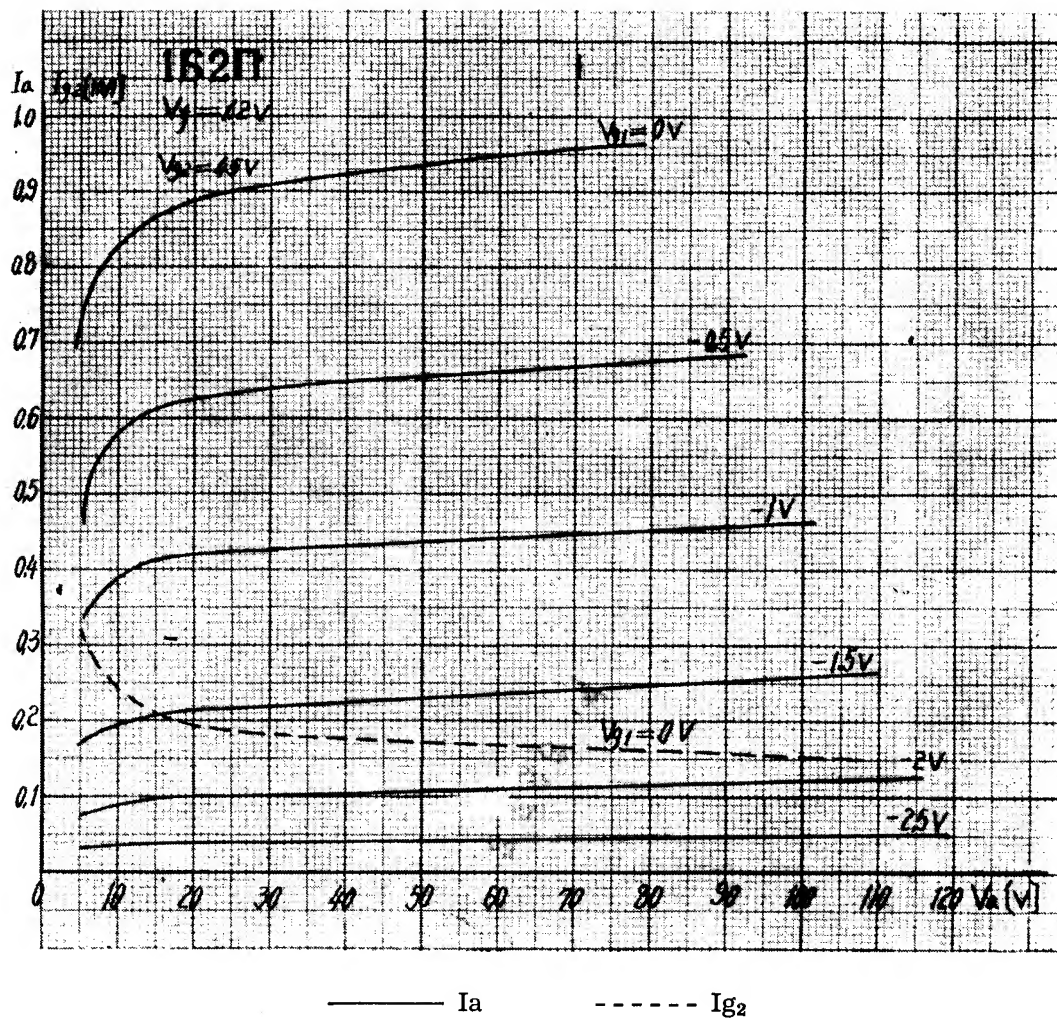
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Mounting: Any

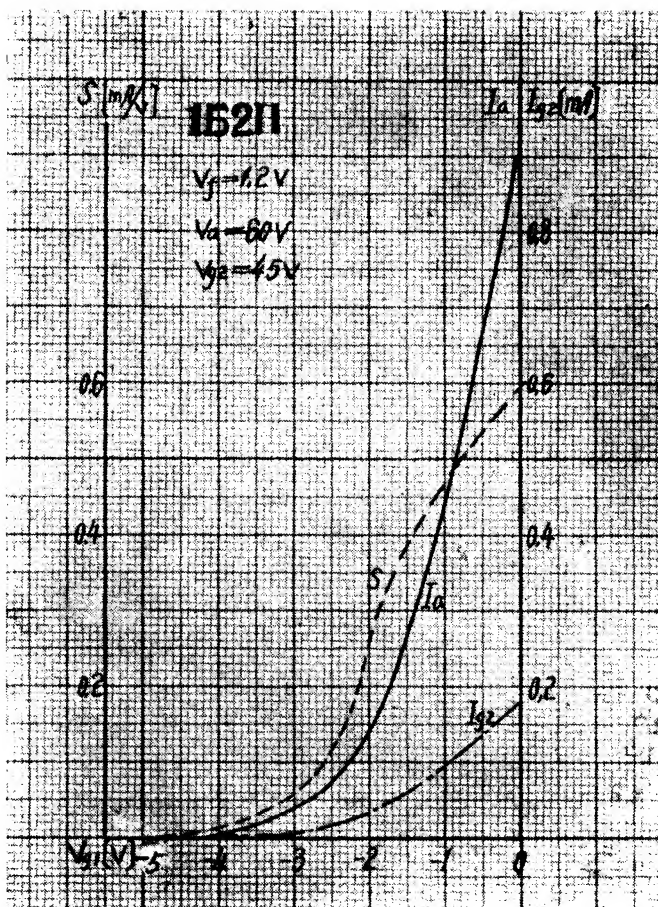
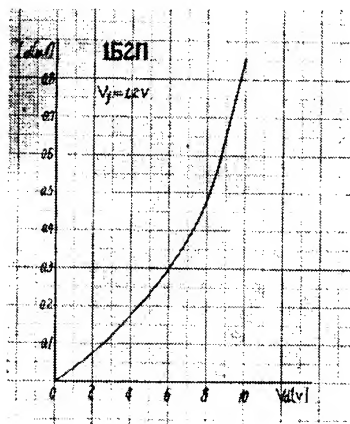


PEKING ELECTRON TUBES

1Б2П



1Б2П

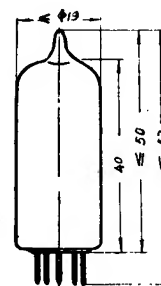
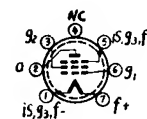


R. F. PENTODE

1K2Π

DESCRIPTION

The miniature tube PEKING 1K2Π is a remote-cutoff pentode with directly heated oxide filament designed for use as h.f. or i.f. amplifier in battery operated receivers, and having a low filament and h.t. consumption.



FILAMENT

Filament voltage	V_f	1.2	V
Filament current	I_f	30	mA

CHARACTERISTICS

Anode voltage	V_a	60	V
Grid No. 2 voltage	V_{g_2}	45	V
Grid No. 1 voltage	V_{g_1}	0	V
Anode current	I_a	1.35	mA
Grid No. 2 current	I_{g_2}	0.35	mA
Transconductance	S	0.7	mA/V
Internal resistance	R_i	1.5	MΩ

PEKING ELECTRON TUBES



1K2Π

R. F. PENTODE

MAXIMUM RATINGS

Filament voltage	V_f	0.9—1.4	V
Anode voltage	V_a max	90	V
Grid No. 2 voltage	V_{g_2} max	75	V
Cathode current	I_k max	3.5	mA
Anode dissipation	W_a max	0.3	W

CAPACITANCES

Input	C_i	3.0	pF
Output	C_o	4.9	pF
Grid No. 1 to anode	$C_{g_1/a}$	≥ 0.01	pF

Base: Miniature 7 pin

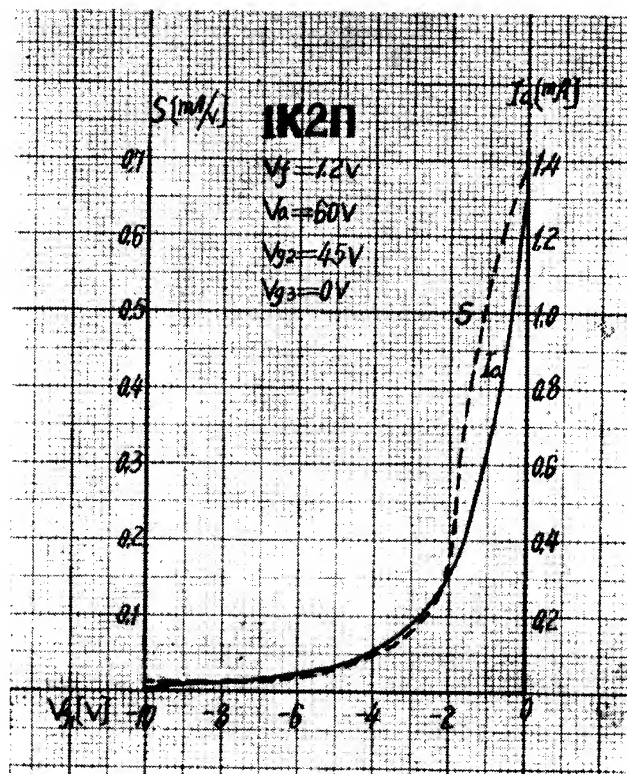
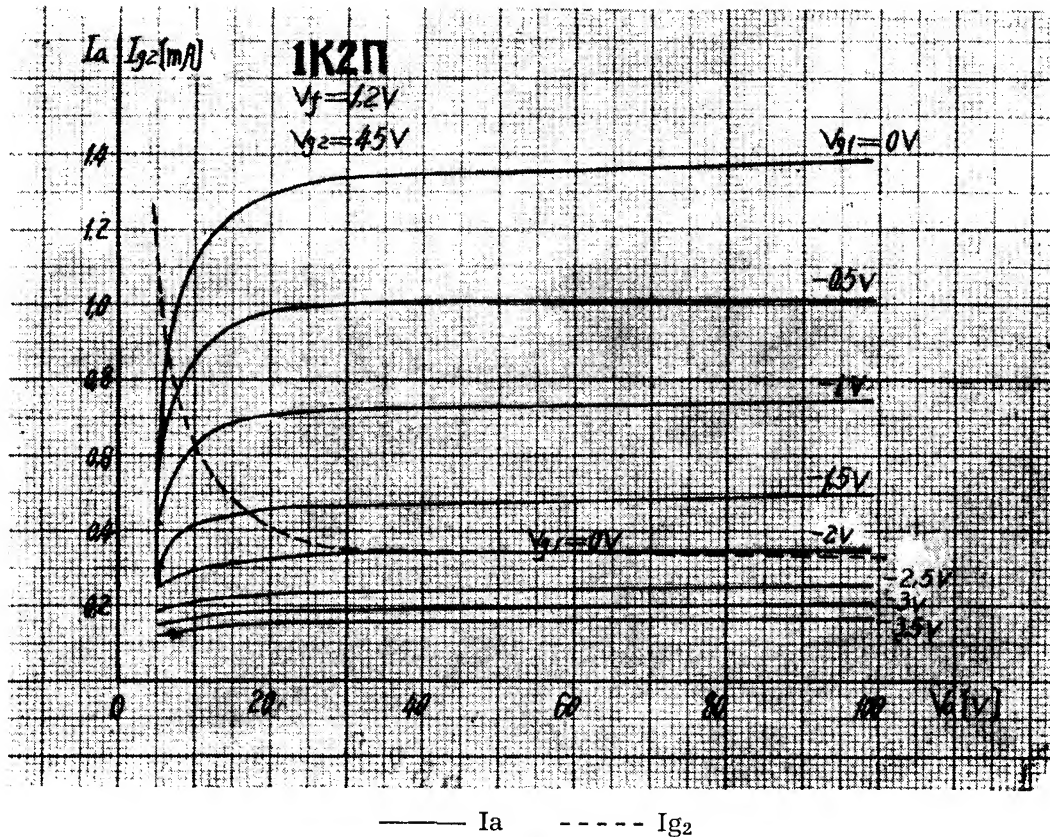
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Mounting: Any.

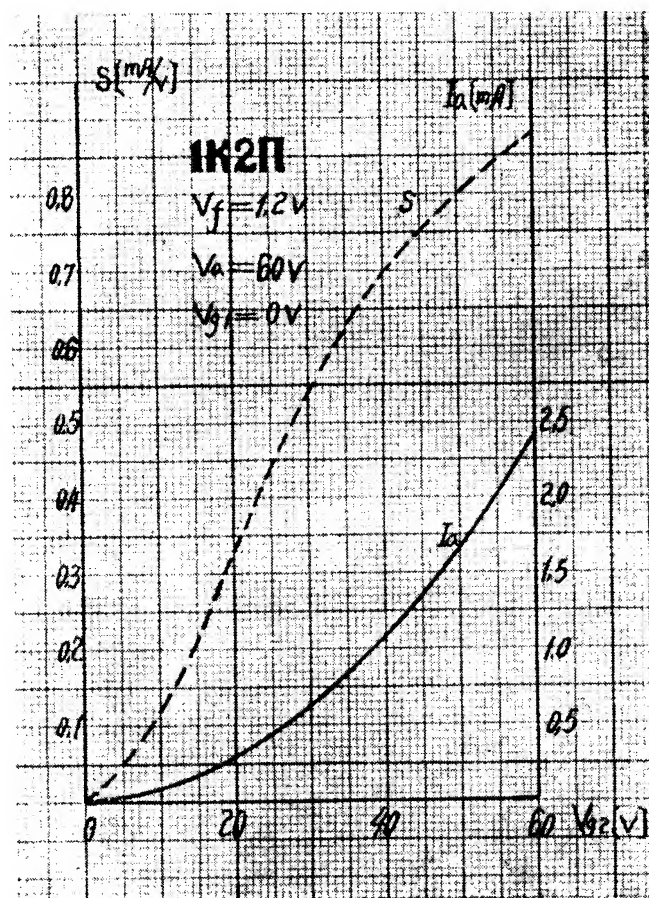


PEKING ELECTRON TUBES

1K2П



1K2П

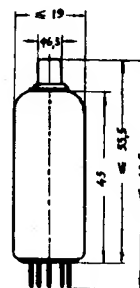
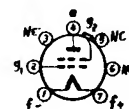
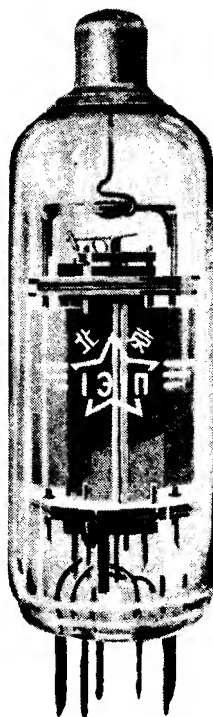


TETRODE

1Э1П

DESCRIPTION

The miniature tube PEKING 1Э1П is a tetrode with directly heated oxide filament for use in electrostatic measurements.



FILAMENT

Filament voltage	V_f	1	V
Filament current	I_f	46	mA

CHARACTERISTICS

Anode voltage	V_a	6	V
Grid No. 1 voltage	V_{g_1}	4	V
Grid No. 2 voltage	V_{g_2}	-3	V
Anode current	I_a	100	μA
Grid No. 1 current	I_{g_1}	400	μA
Grid No. 2 current	I_{g_2}	7×10^{-8}	μA
Transconductance	S	50	$\mu A/V$
Amplification factor	μ	1.3	

Base: Miniature 7 pin
Weight: 15 g. (approx.)
Mounting: Any

PEKING ELECTRON TUBES

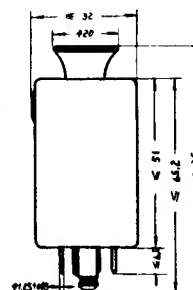
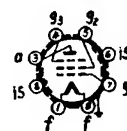
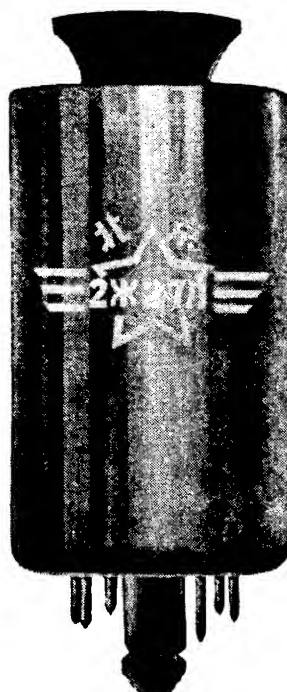


R. F. PENTODE

2Ж27Л

DESCRIPTION

The loctal type PEKING 2Ж27Л is a sharp-cutoff pentode with directly heated oxide filament, primarily intended for use as h.f. amplifier and is suitable for use at 120 MC/S.



FILAMENT

Filament voltage
Filament current

V_f	2.2	V
I_f	57	mA

CHARACTERISTICS

Anode voltage	V_a	120	V
Grid No. 2 voltage	V_{g_2}	45	V
Grid No. 1 voltage	V_{g_1}	0	V
Grid No. 3 voltage	V_{g_3}	0	V
Anode current	I_a	1.9	mA
Grid No. 2 current	I_{g_2}	<0.5	mA
Transconductance	S	1.25	mA/V
Internal resistance	R_i	>0.7	MΩ
Equivalent noise resistance	R_{eq}	6	KΩ
Input impedance at 60 MC/S.	$R_{g \text{ in}}$	15	KΩ
Grid No. 1 voltage for anode current of 100 μ A.	$V_{g_1'}$	>4.8	V
Grid No. 1 voltage for grid No. 1 circuit current of 0.5 μ A.	$V_{g_1''}$	0 to 1	V

PEKING ELECTRON TUBES



2Ж27Л

R. F. PENTODE

MAXIMUM RATINGS

Filament voltage	V_f	2.0—2.4	V
Anode voltage	$V_a \text{ max}$	200	V
Grid No. 2 voltage	$V_{g_2} \text{ max}$	120	V
Anode dissipation	$W_a \text{ max}$	1.0	W
Grid No. 2 dissipation	$W_{g_2} \text{ max}$	0.3	W
Cathode current	$I_k \text{ max}$	5	mA

CAPACITANCES

Input	C_i	5.3	pF
Output	C_o	4.9	pF
Grid No. 1 to anode	$C_{g_1/a}$	<0.015	pF
Anode to cathode	$C_{a/k}$	<0.01	pF

Base: Loctal 8 pin

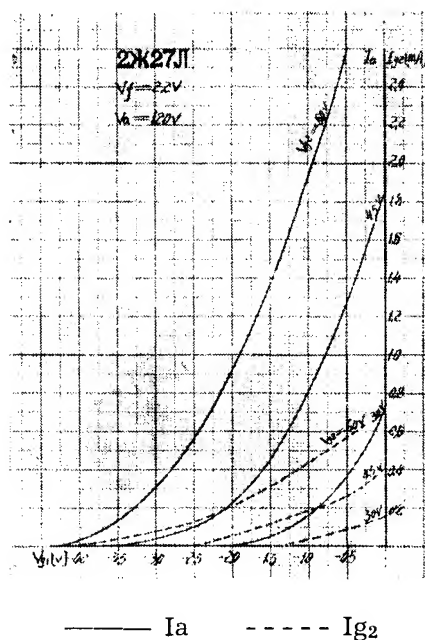
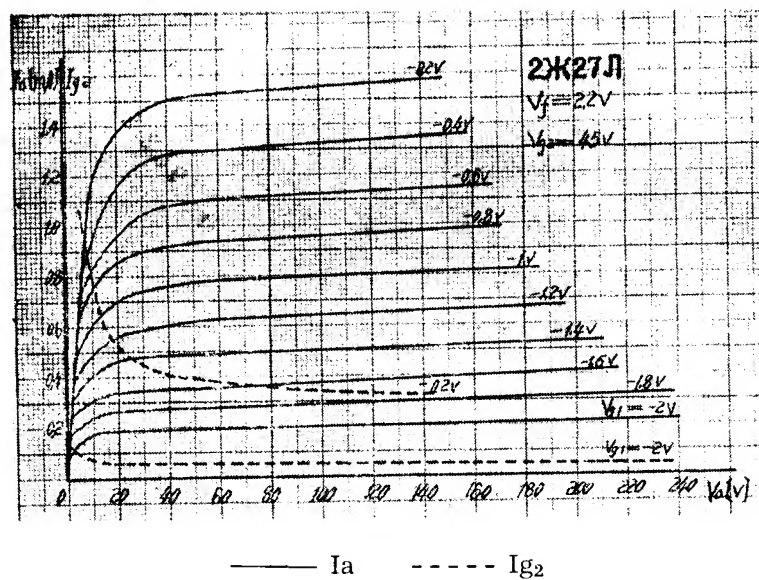
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Mounting: Any

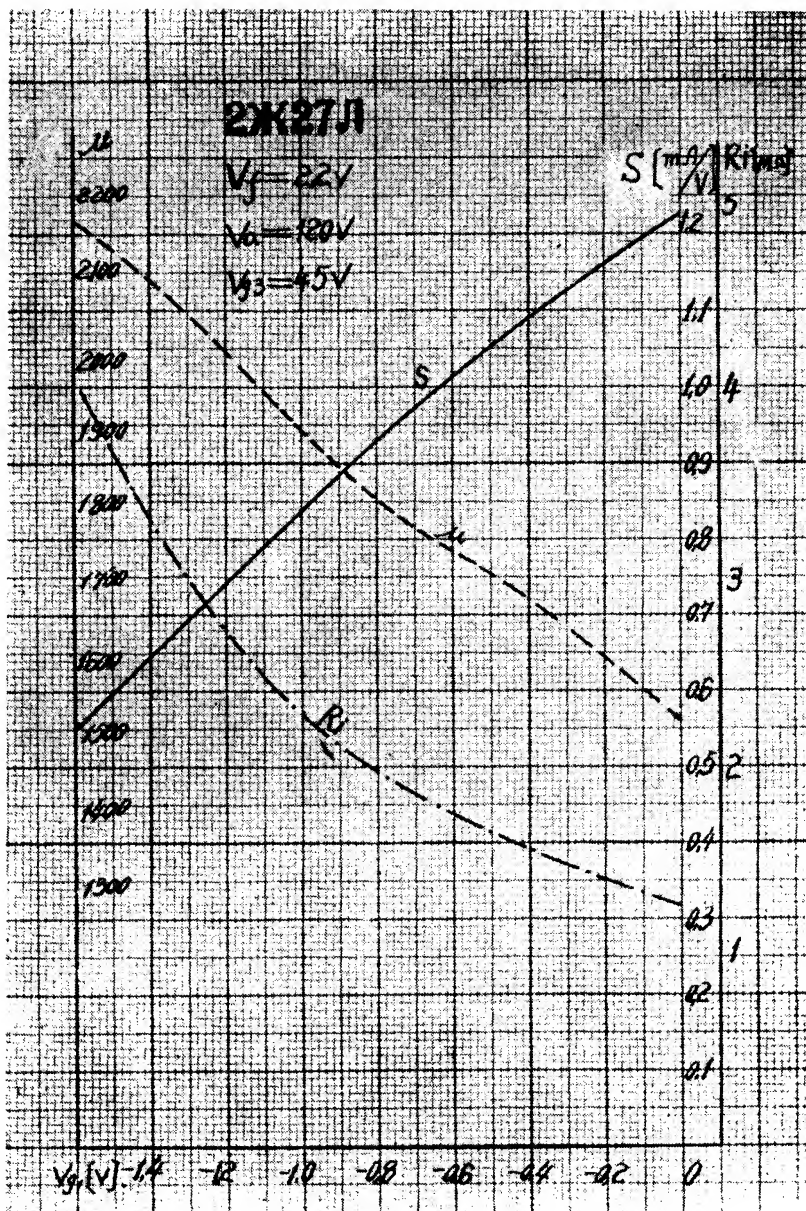


PEKING ELECTRON TUBES

2Ж27Л



2Ж27Л

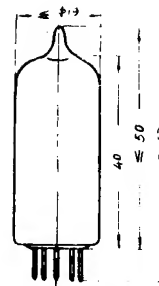
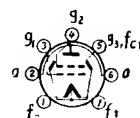


OUTPUT TETRODE

2Π2Π

DESCRIPTION

The miniature tube PEKING 2Π2Π is a output tetrode with centre-tapped directly heated oxide filament designed for use as an output power amplifier in battery operated equipment, and having a low filament and h.t. consumption.



FILAMENT

Filament voltage
Filament current

V_f
 I_f

Series Parallel

2.4	1.2	V
30	60	mA

CHARACTERISTICS

(Parallel filament connection)

Anode voltage
Grid No. 2 voltage
Grid No. 1 voltage
Anode current
Grid No. 2 current
Transconductance

V_a
 V_{g_2}
 V_{g_1}
 I_a
 I_{g_2}
 S

60	V
60	V
-3.5	V
3.5	mA
0.8	mA
1.1	mA/V

PEKING ELECTRON TUBES



2Π2Π

OUTPUT TETRODE

OPERATING CONDITIONS

(As single tube class A amplifier)

Anode voltage	V _a	60	V
Grid No. 2 voltage	V _{g₂}	60	V
Grid No. 1 voltage	V _{g₁}	-3.5	V
R.M.S. input voltage	V _{g₁₂}	2.5	V
Anode load resistor	R _l	20	KΩ
Anode current	I _a	3.5	mA
Grid No. 2 current	I _{g₂}	0.8	mA
Power output	W _o	7.5	W
Total harmonic distortion	D _{tot}	10	%

MAXIMUM RATINGS

		series	Parallel
Filament voltage	V _f	1.8—2.8	0.9—1.4 V
Anode voltage	V _a max	90	V
Grid No. 2 voltage	V _{g₂} max	90	V
Anode dissipation	W _a max	0.4	W
Cathode current	I _k max	7	mA
Grid No. 1 circuit resistor	R _{g₁} max	0.5	MΩ

CAPACITANCES

Input	C _i	3.7	pF
output	C _o	3.2	pF
Grid No. 1 to Anode	C _{g₁/a}	0.4	pF

Base: Miniature 7 pin

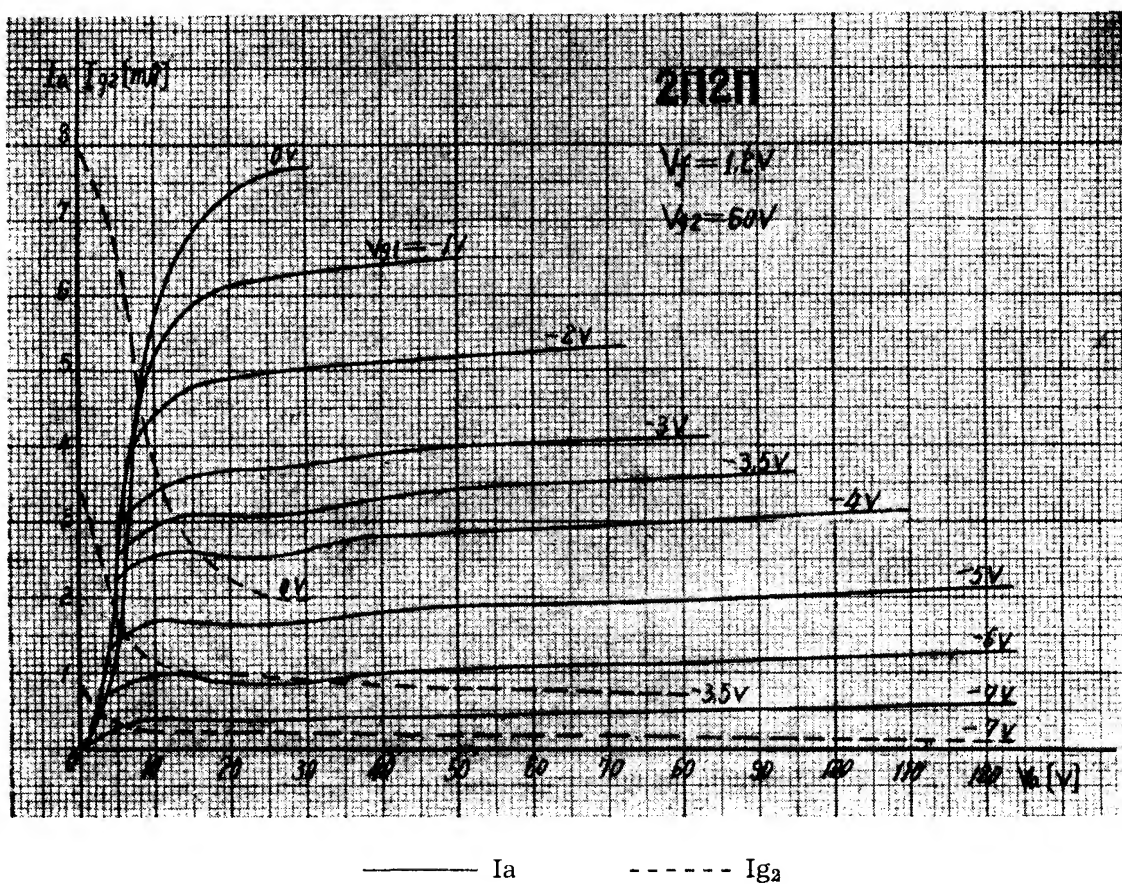
Weight: 10 g. (approx.)

Mounting: Any



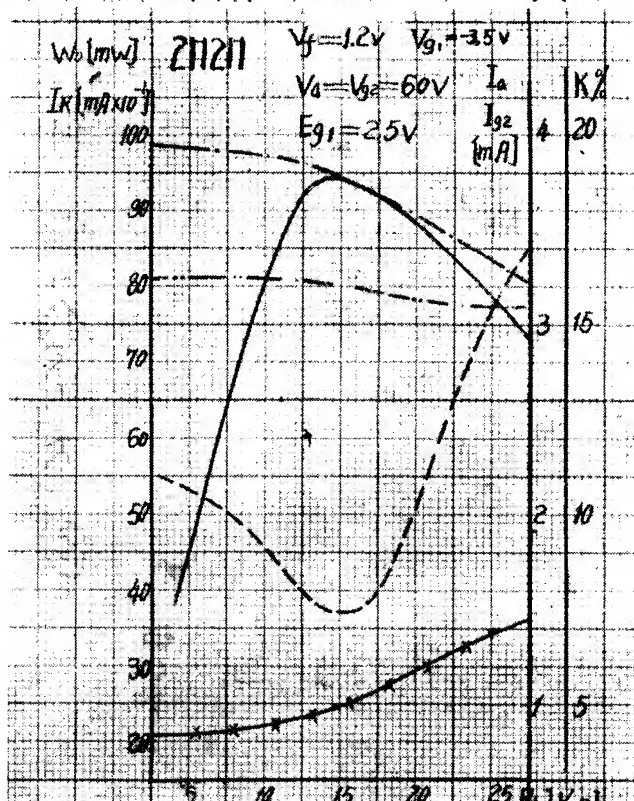
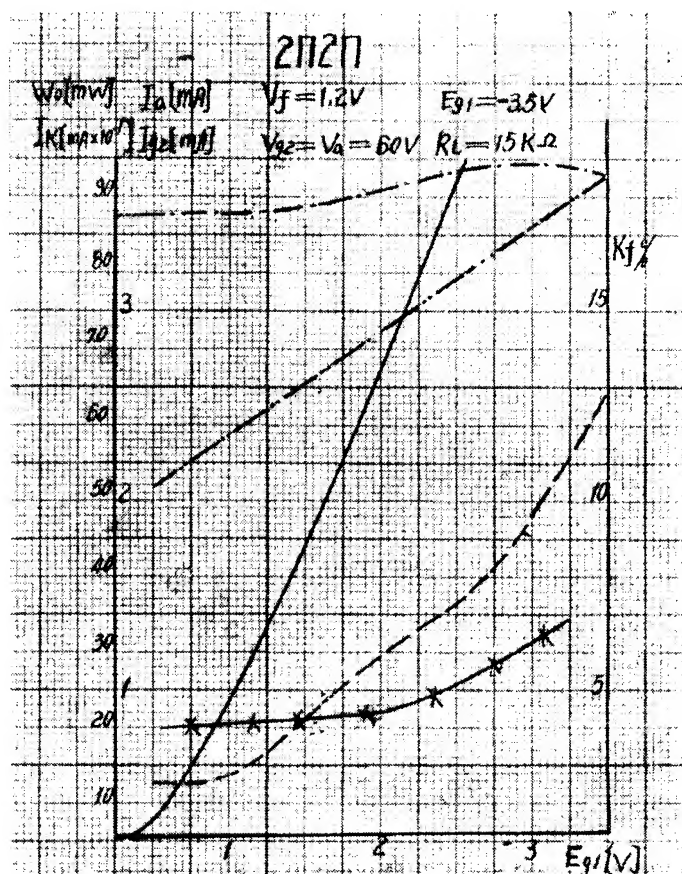
PEKING ELECTRON TUBES

2П2П



2П2П

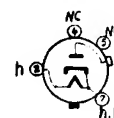
————— W_o
 - - - - - K_f
 - - I_a
 - - I_k (peak)
 —×—×— I_{g2}



HALF-WAVE RECTIFIER 2U2C

DESCRIPTION

The octal type PEKING 2U2C is a high vacuum half-wave rectifier with indirectly heated oxide cathode, designed for use as high-tension power supply in a.c. main operated equipment.



HEATER

Heater voltage	V_h	2.5	V
Heater current	I_h	1.75	A

CHARACTERISTICS

Anode voltage	V_a	200	V
Anode current	I_a	47.5	mA

OPERATING CONDITIONS

R.M.S. anode supply voltage	$V_{a\sim}$	4500	V
Load resistor	R_l	0.6	$M\Omega$
Filter capacitor	C_f	0.06	μF
D.C. output current	I_l	> 6.8	mA

MAXIMUM RATINGS

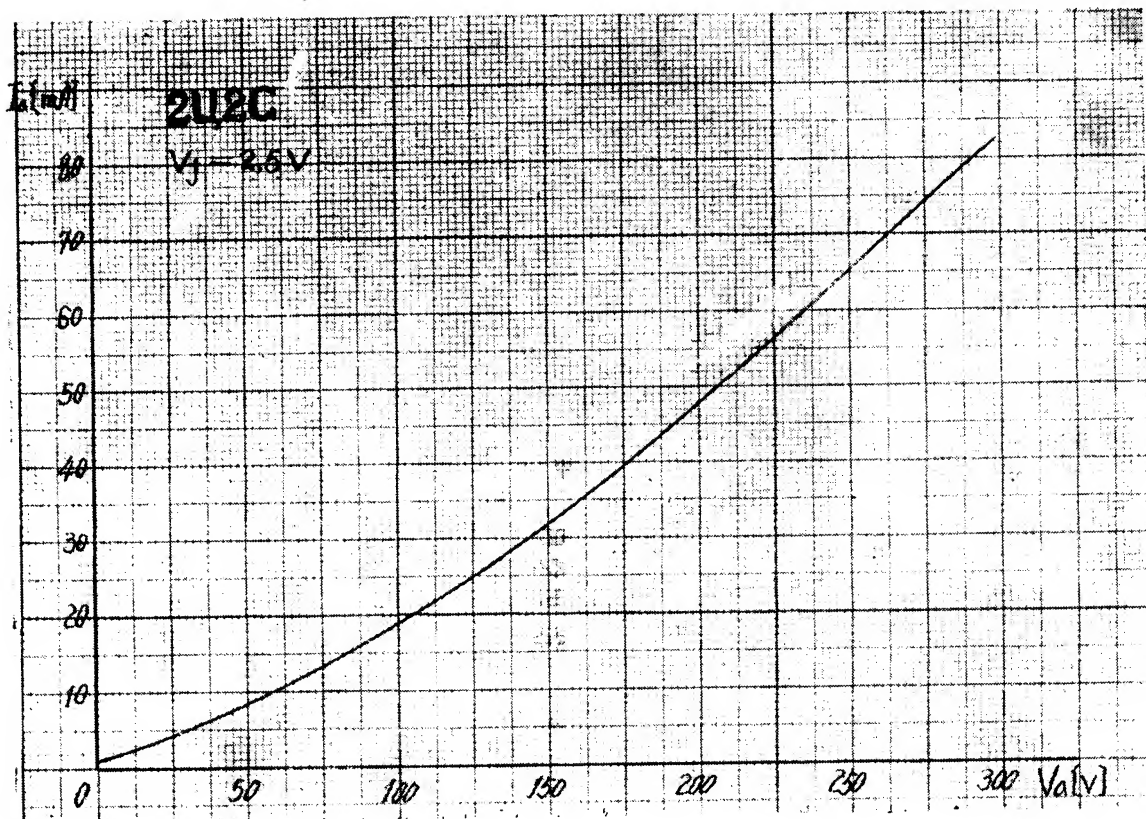
Heater voltage	V_h	2.25—2.75	V
Peak inverse anode voltage	$V_{pk\ max}$	12.5	K.V.
Peak anode current	$I_{pk\ max}$	100	mA

Base: Octal
Weight: 55 g. max
Mounting: Vertical

PEKING ELECTRON TUBES



2U2C

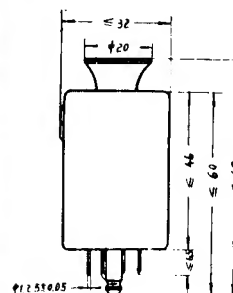
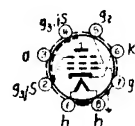
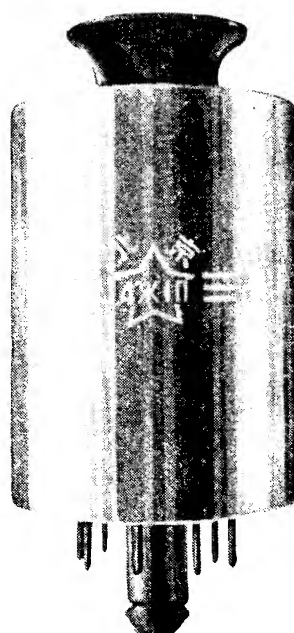


R. F. PENTODE

4Ж1Л

DESCRIPTION

The loctal type PEKING 4Ж1Л is a sharp-cutoff pentode with indirectly heated oxide cathode, primarily intended for use as h.f. amplifier or low oscillator drive and is suitable for use at 200 Mc/s.



HEATER

Heater voltage	V_h	4.2	V
Heater current	I_h	225	mA

CHARACTERISTICS

Anode voltage	V_a	150	V
Grid No. 2 voltage	V_{g_2}	75	V
Grid No. 1 voltage	V_{g_1}	-2.35	V
Grid No. 3 voltage	V_{g_3}	0	V
Anode current	I_a	2.0	mA
Grid No. 2 current	I_{g_2}	<0.7	mA
Transconductance	S	1.5	mA/V
Internal resistance	R_i	>1.0	MΩ
Amplification factor (triode connection at 125V/2.5mA)	μ	20	

PEKING ELECTRON TUBES



4Ж1Л

R. F. PENTODE

OPERATING CONDITIONS

As single tube class A amplifier

H.T. line voltage	$V_{h.t.}$	250	V
Anode load resistor	R_l	3.5	$K\Omega$
Grid No. 2 circuit resistor	R_{g_2}	20	$K\Omega$
Cathode bias resistor	R_k	500	Ω
R.M.S. grid No. 1 voltage	$V_{g_1} \sim$	2.8	V
Anode current	I_a		mA
Grid No. 2 current	I_{g_2}		mA
Power output	W_o	> 0.5	W

MAXIMUM RATINGS

Heate voltage	V_h	3.6—4.8	V
Anode voltage	$V_a \text{ max}$	250	V
Grid No. 2 voltage	$V_{g_2} \text{ max}$	225	V
Anode dissipation	$W_a \text{ max}$	2	W
Grid No. 2 dissipation	$W_{g_2} \text{ max}$	0.7	W
Cathode current	$I_k \text{ max}$	11	mA
Heater-cathode voltage	$V_{hk} \text{ max}$	100	V

CAPACITANCES

Input	C_i	4.0	pF
Outvut	C_o	4.2	pF
Grid No. 1 to anode	$C_{g_1/a}$	<0.007	pF

Base: Loctal 8 pin

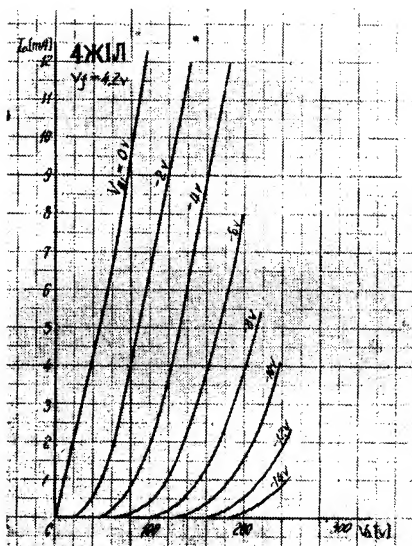
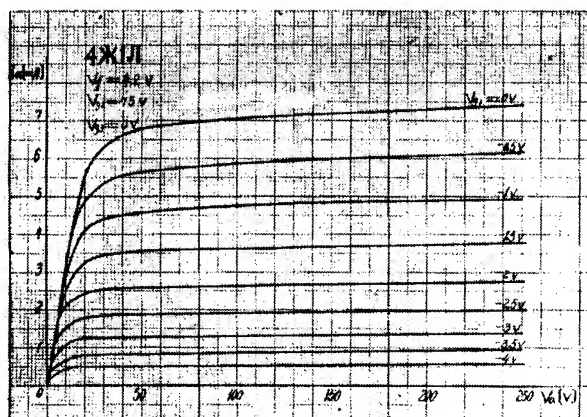
Weight: 35 g.

Mounting: Any

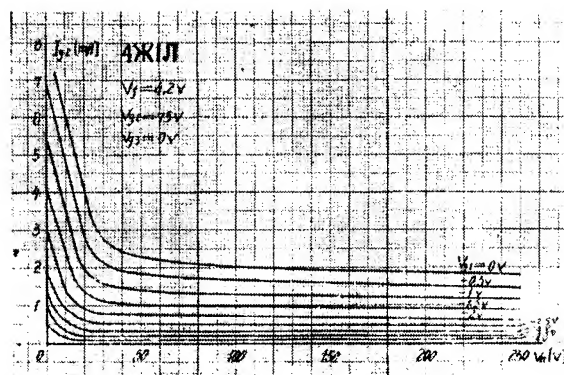
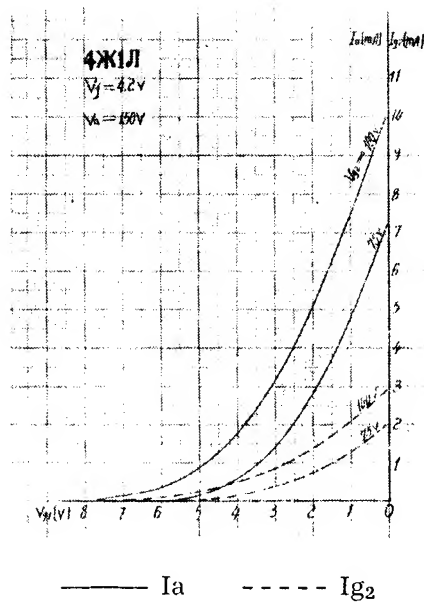


PEKING ELECTRON TUBES

4Ж1Л



4Ж1Л

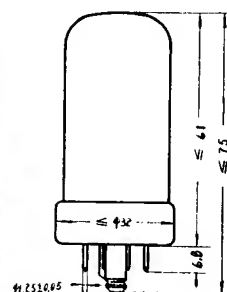
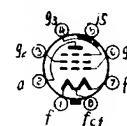
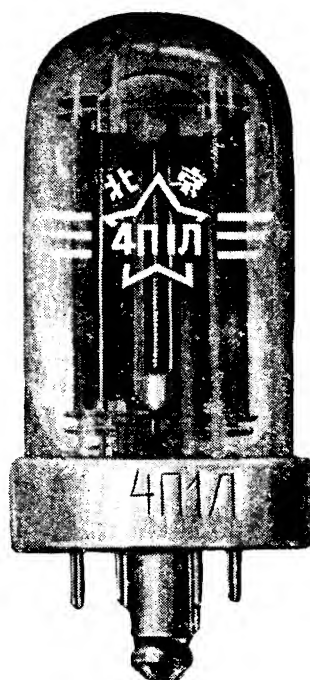


OUTPUT PENTODE

4П1Л

DESCRIPTION

The loctal type PEKING 4П1Л is a output pentode with center-tapped directly heated oxide filament, primarily intended for use as h. f. power amplifier or oscillator drive and is suitable for use at 200 MC/S.



FILAMENT

Filament voltage
Filament current

V_f
 I_f

Series Parallel

Series	Parallel	V	mA
4.2	2.1	V	
325	650		mA

CHARACTERISTICS

Anode voltage
Grid No. 2 voltage
Grid No. 3 voltage
Grid No. 1 voltage
Anode current
Grid No. 2 current
Transconductance
Anode current (at $V_{g1} = -18$ V)
Amplification factor (triode connection at 125V & 175 V/35mA)

V_a
 V_{g2}
 V_{g3}
 V_{g1}
 I_a
 I_{g2}
 S
 I_{ao}
 μ

150	V
150	V
0	V
-7	V
35	mA
6.5	mA
6	mA/V
7	mA
9.5	

PEKING ELECTRON TUBES



4Π1Л

OUTPUT PENTODE

OPERATIONS CONDITIONS

For power amplifier

Anode voltage	Va	200	V
Grid No. 2 voltage	Vg ₂	150	V
Grid No. 3 voltage	Vg ₃	+15	V
Grid No. 1 voltage	Vg ₁	-20	V
R.M.S. grid No. 1 voltage	Vg ₁ ~	18	V
Anode current	Ia	50	mA
Grid No. 2 current	Ig ₂	10	mA
Grid No. 1 current	Ig ₁	≈1	mA
Power output	Wo	4.2	W
Frequency	f	12	MC/S

MAXIMUM RATINGS

		Series	Parallel
Filament voltage	Vf	3.9—4.7	1.95—2.35 V
Anode voltage	Va max	250	V
Grid No. 2 voltage	Vg ₂ max	250	V
Anode dissipation	Pa max	7.5	W
Grid No. 2 dissipation	Pg ₂ max	1.5	W
Cathode current	Ik max	50	mA
Grid No. 1 circuit resistor	Rg ₁ max	0.5	MΩ
Grid No. 3 circuit resistor	Rg ₃ max	0.1	MΩ

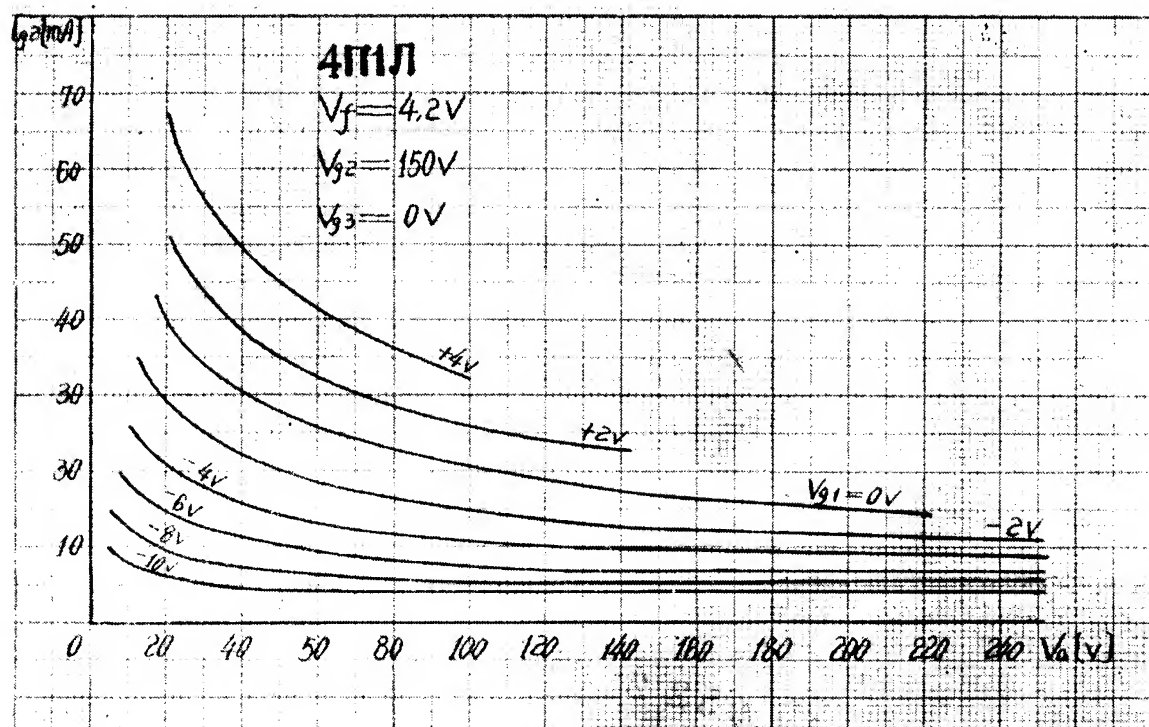
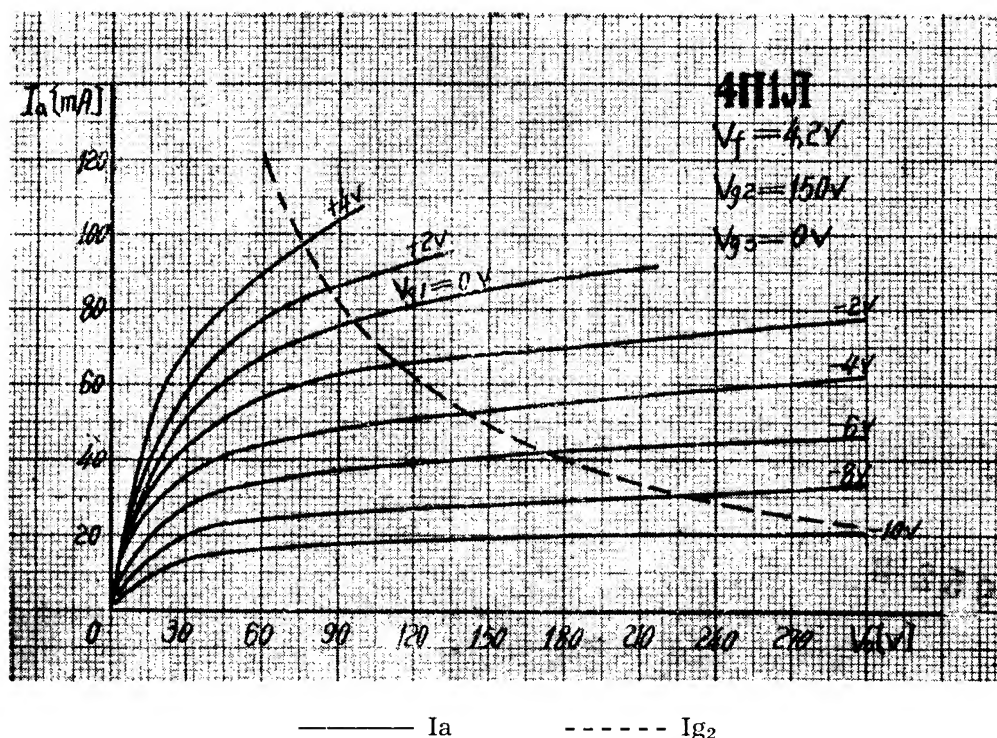
CAPACITANCES

Input	Ci	8.5	pF
Output	Co	9.4	pF
Grid No. 1 to anode	Cg ₁ a	< 0.1	pF

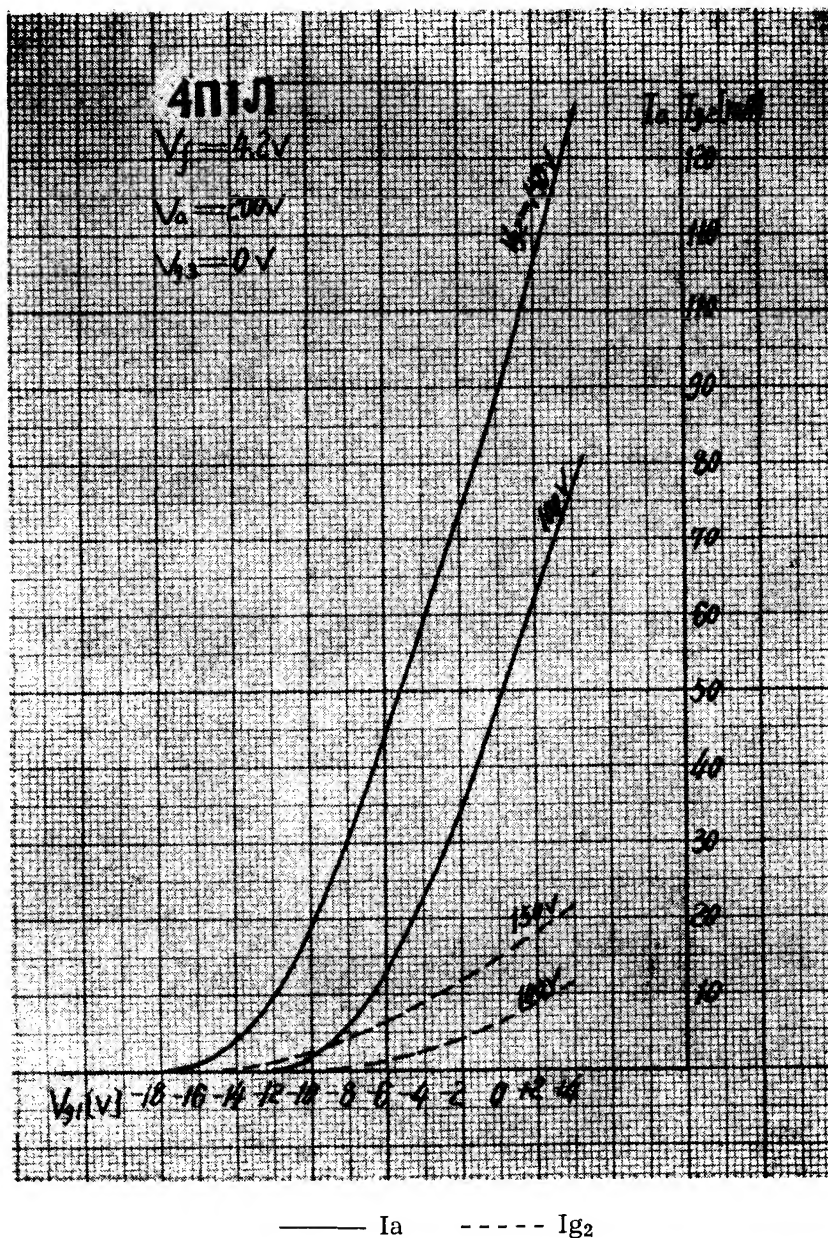
Base: Loctal 8 pin**Weight:** 30 g. max**Mounting:** Any

PEKING ELECTRON TUBES

4П1Л



4П1Л

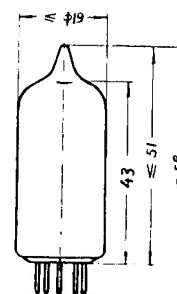
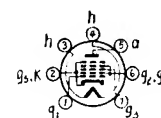


HEPTODE

6A2Π

DESCRIPTION

The miniature tube PEKING 6A2Π is a heptode with indirectly heated oxide cathode designed for use as a mixer-oscillator in a.c. mains operated receivers.



HEATER

Heater voltage	V_h	6.3	V
Heater current	I_h	300	mA

OPERATING CHARACTERISTICS*

Anode voltage	V_a	250	V
Grids No. 2 & No. 4 voltage	$V_{g_2 + g_4}$	100	V
Grid No. 3 voltage	V_{g_3}	-1.5	V
Grid No. 1 circuit resistance	R_{g_1}	20	KΩ
Anode current	I_a	3.0	mA
Grids No. 2 & No. 4 current	$I_{g_2 + g_4}$	7.0	mA
Grids No. 1 current	I_{g_1}	0.5	mA
Total cathode current	I_k	10.5	mA
Conversion transconductance	S_c	0.47	mA/V
Oscillation transconductance	S_o	6.0	mA/V
Internal resistance	R_i	1.0	MΩ

* The characteristics shown with separate excitation correspond very closely to those obtained in a self-excited oscillator circuit operating with zero bias.

PEKING ELECTRON TUBES



6A2Π

HEPTODE

MAXIMUM RATINGS

Heater voltage	V_h	5.7—6.9	V
Anode voltage	$V_a \text{ max}$	330	V
Grids No. 2 & No. 4 voltage	$V_{g_2 + g_4} \text{ max}$	100	V
Grid No. 3 voltage	$V_{g_3} \text{ max}$	-50	V
Anode dissipation	$W_a \text{ max}$	1.1	W
Grids No. 2 & No. 4 dissipation	$W_{g_2 + g_3} \text{ max}$	1.1	W
Cathode current	I_k	14	mA
Heater-cathode voltage	$V_{hk} \text{ max}$	±100	V

CAPACITANCES

Signal input	$C_i (g_3)$	7.2	pF
Mixer output	C_o	8.5	pF
Oscillator input	$C_i (g_1)$	2.8	pF
Grid No. 3 to anode	$C_{g_3/a}$	0.3	pF

Base: Miniature 7 pin

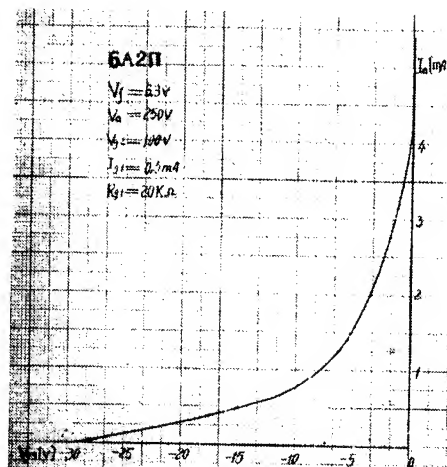
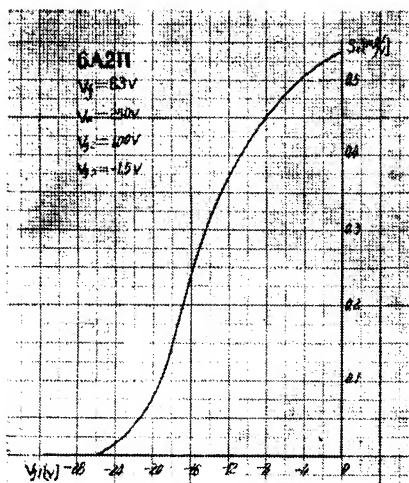
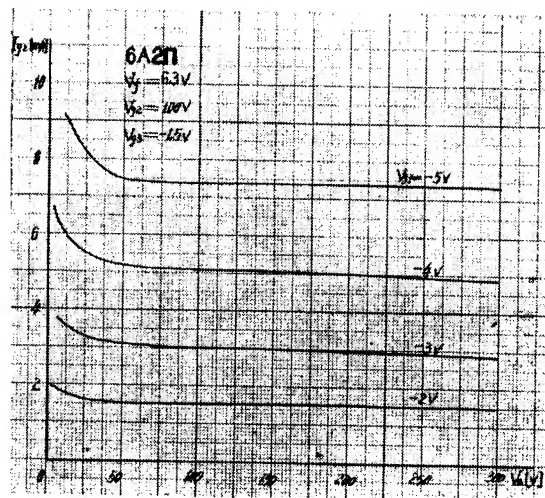
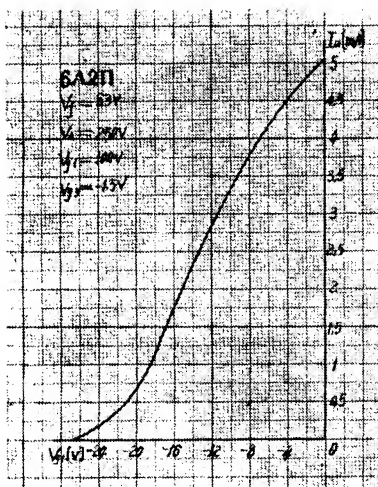
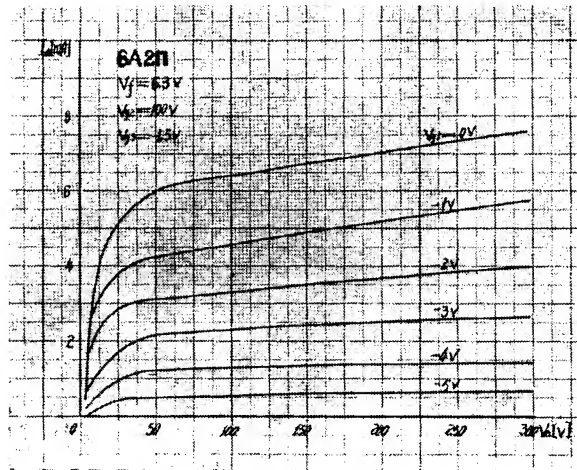
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Mounting: Any

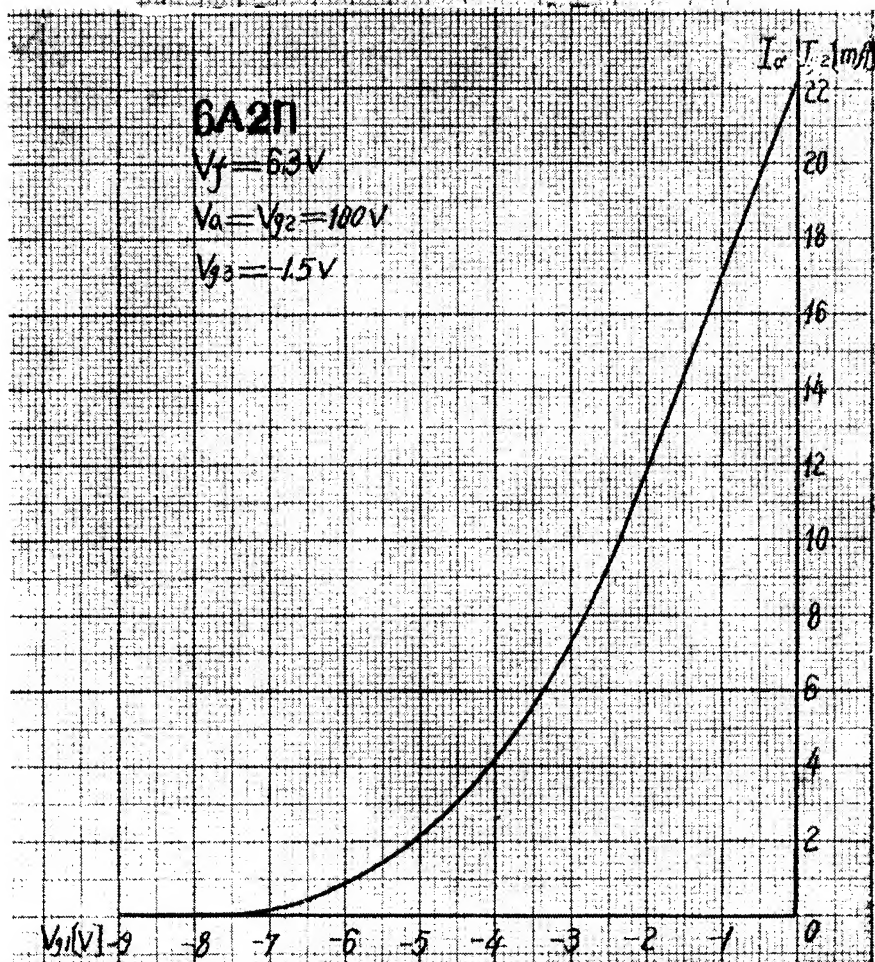
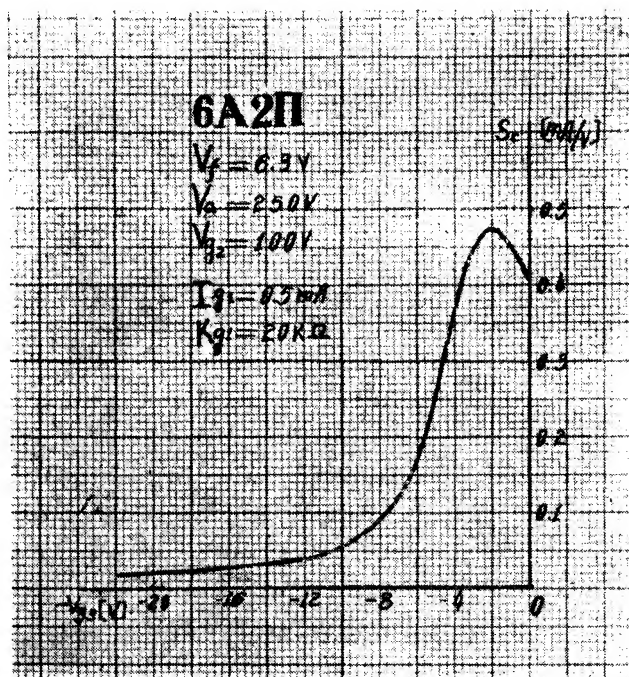


PEKING ELECTRON TUBES

6A2П



6A2П

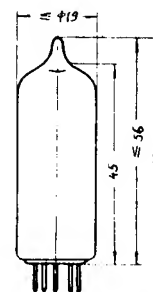
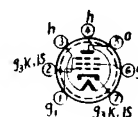


R. F. PENTODE

6K4Π

DESCRIPTION

The miniature tube PEKING 6K4Π is a remote-cutoff pentode with indirectly heated oxide cathode designed for use as h.f. or i.f. amplifier in a.c. mains operated receivers.



HEATER

Heater voltage	V_h	6.3	V
Heater current	I_h	300	mA

CHARACTERISTICS

Anode voltage	V_a	250	V
Grid No. 2 voltage	V_{g_2}	100	V
Cathode bias resistor	R_k	68	Ω
Anode current	I_a	10	mA
Grid No. 2 current	I_{g_2}	≤ 5.5	mA
Transconductance	S	4.4	mA/V
Grid No. 1 Bias (Approx.) for transconductance of 40 μ A/V.	V_{g_1}	-20	V

PEKING ELECTRON TUBES



6K4Π

R. F. PENTODE

MAXIMUM RATINGS

Heater voltage	V_h	5.7—6.9	V
Anode voltage	$V_a \text{ max}$	300	V
Grid No. 2 voltage	$V_{g_2} \text{ max}$	125	V
Anode dissipation	$W_a \text{ max}$	3.0	W
Grid No. 2 dissipation	$W_{g_2} \text{ max}$	0.6	W
Cathode current	$I_k \text{ max}$	20	mA
Grid No. 1 circuit resistor	$R_{g_1} \text{ max}$	500	$K\Omega$
Heater—cathode voltage	$V_{hk} \text{ max}$	± 90	V

CAPACITANCES

input	C_i	6.0	pF
output	C_o	6.3	pF
Grid No. 1 to anode	$V_{g_1/a}$	≤ 0.0045	pF

Base: Miniature 7 pin

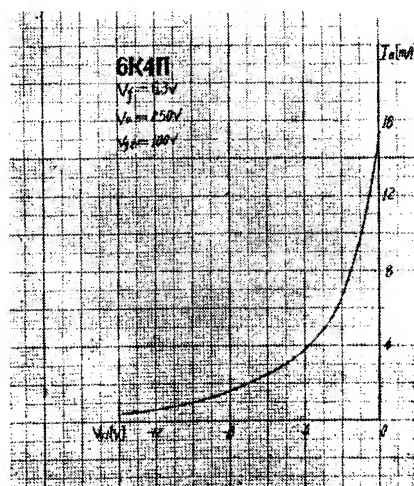
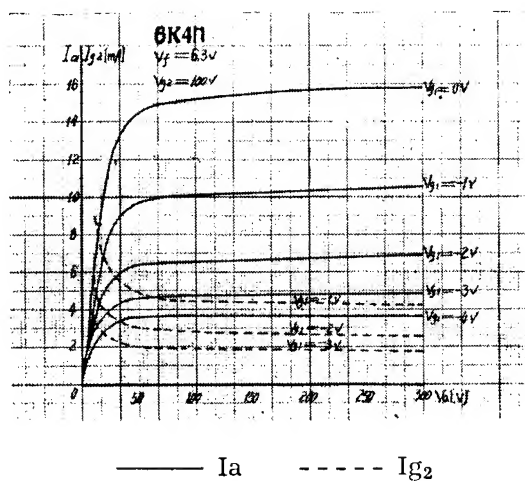
Weight: 13 g.

Mounting: Any

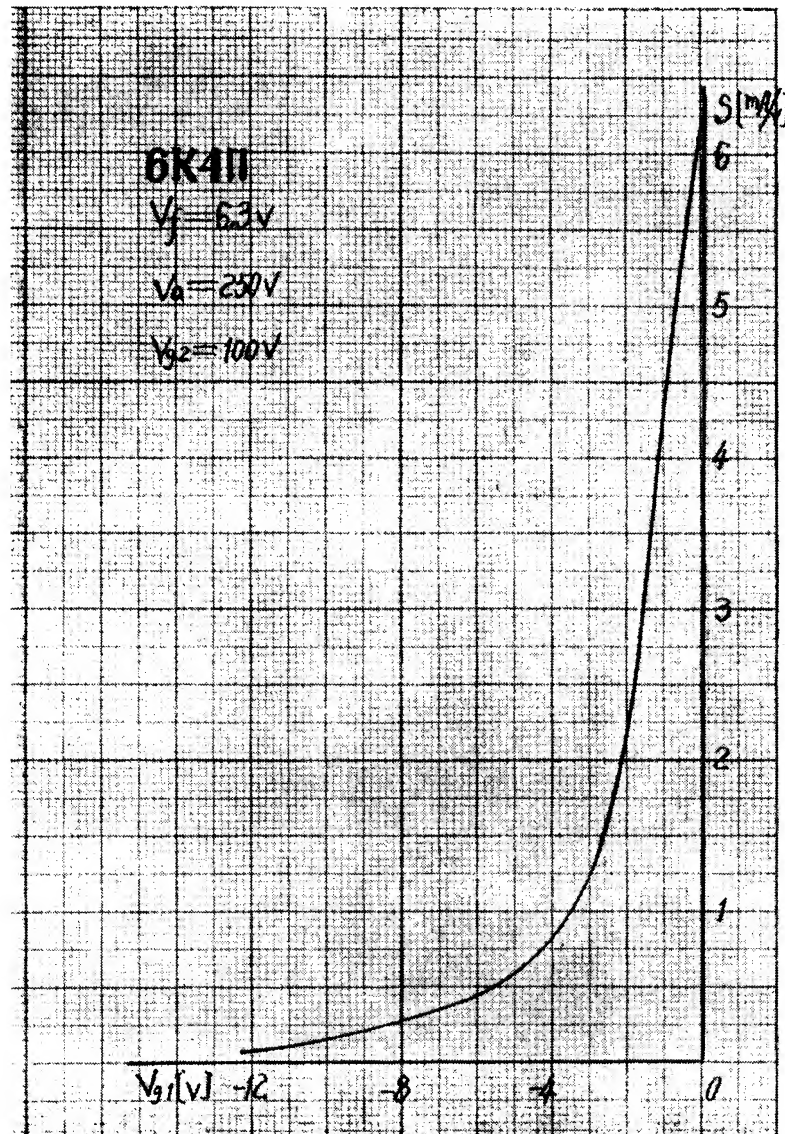


PEKING ELECTRON TUBES

6K4П



6K4Π

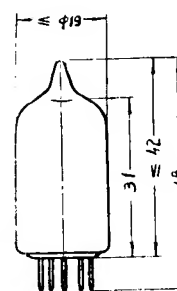
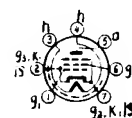


R. F. PENTODE

6Ж1П

DESCRIPTION

The miniature tube PEKING 6Ж1П is a sharp-cutoff pentode with indirectly heated oxide cathode designed for use as wide-band or v.h.f. amplifier of frequencies up to 400 Mc/s. in a.c. mains operated equipment.



HEATER

Heater voltage	V_h	6.3	V
Heater current	I_h	170	mA

CHARACTERISTICS

Anode voltage	V_a	120	V
Grid No. 2 voltage	V_{g_2}	120	V
Cathode bias resistor	R_k	200	Ω
Anode current	I_a	7.35	mA
Grid No. 2 current	I_{g_2}	≤ 3.2	mA
Transconductance	S	5.2	mA/V
Internal resistance	R_i	0.3	M Ω
Equivalent noise resistance	R_{eq}	1.8	K Ω

PEKING ELECTRON TUBES



6Ж1П

R. F. PENTODE

MAXIMUM RATINGS

Heater voltage	V_h	5.7—6.9	V
Anode voltage	V_a max	200	V
Grid No. 2 voltage	V_{g_2} max	150	V
Anode dissipation	W_a max	1.8	W
Grid No. 2 dissipation	P_{g_2} max	0.55	W
Cathode current	I_k max	20	mA
Grid No. 1 circuit resistor	R_{g_1} max	1.0	M Ω
Heater—cathode voltage	V_{kh}	± 120	V

CAPACITANCES

input	C_i	4.3	pF
output	C_o	2.35	pF
Grid No. 1 to anode	$C_{g_1 a}$	≤ 0.02	pF

Base: Miniature 7 pin

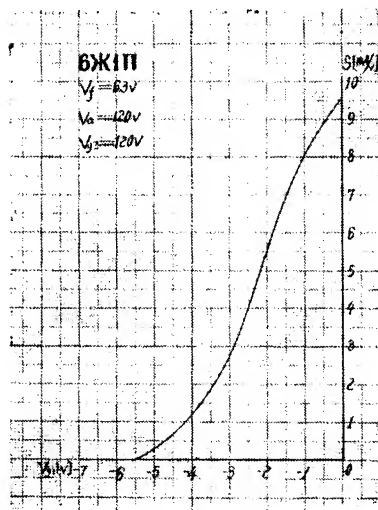
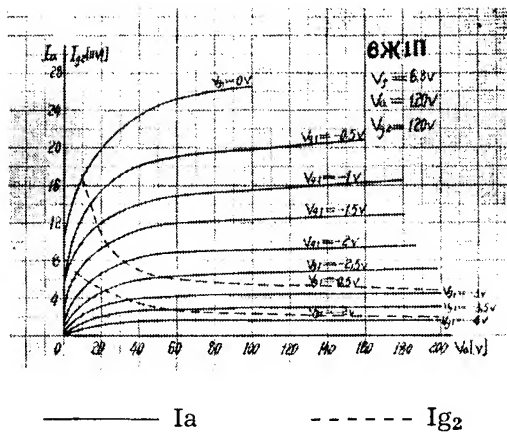
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Mounting: Any

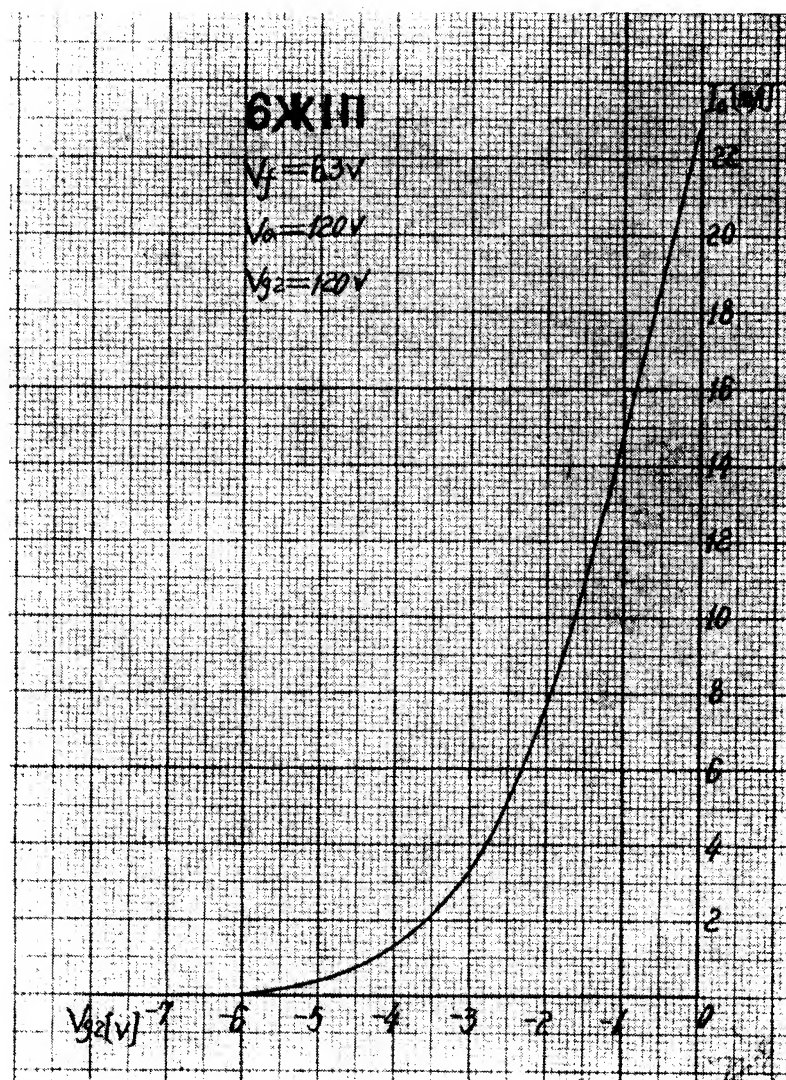


PEKING ELECTRON TUBES

6Ж1П



6Ж1П

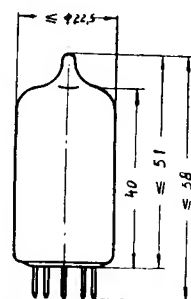


TWIN TRIODE

6H1П

DESCRIPTION

The miniature tube PEKING 6H1П is a medium-mu twin triode with indirectly heated separate oxide cathodes, primarily intended for use as an a.f. voltage amplifier or phase inverter in a.c. mains operated equipment.



HEATER

Heater voltage	V_h	6.3	V
Heater current	I_h	600	mA

CHARACTERISTICS (each section)

Anode voltage	V_a	250	V
Cathode bias resistor	R_k	600	Ω
Anode current	I_a	7.5	mA
Transconductance	S	4.35	mA/V
Amplification factor	μ	35	
Internal resistance	R_i	8.0	K Ω

PEKING ELECTRON TUBES



6H1Π

TWIN TRIODE

MAXIMUM RATINGS (each section)

Heater voltage	V_h	5.7—6.9	V
Anode voltage	V_a	300	V
Anode dissipation	W_a	2.2	W
Cathode current	I_k	25	mA
Grid circuit resistor	R_g	1.0	M Ω
Heater—cathode voltage	V_{hk}	+100 —250	V V

CAPACITANCES

Input (each section)	C_i	3.1	pF
Output (each section)	C_o	1.85	pF
Grid to anode (each section)	$C_{g/a}$	≤ 2.7	pF
Anode No. 1 to anode No. 2	C_{a_1/a_2}	≤ 0.2	pF

Base: Miniature 9 pin

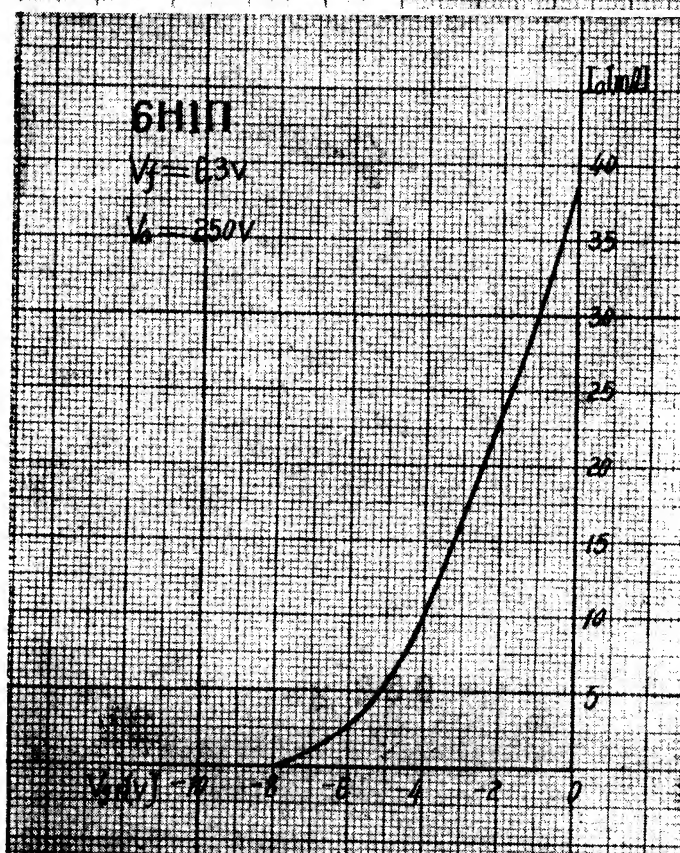
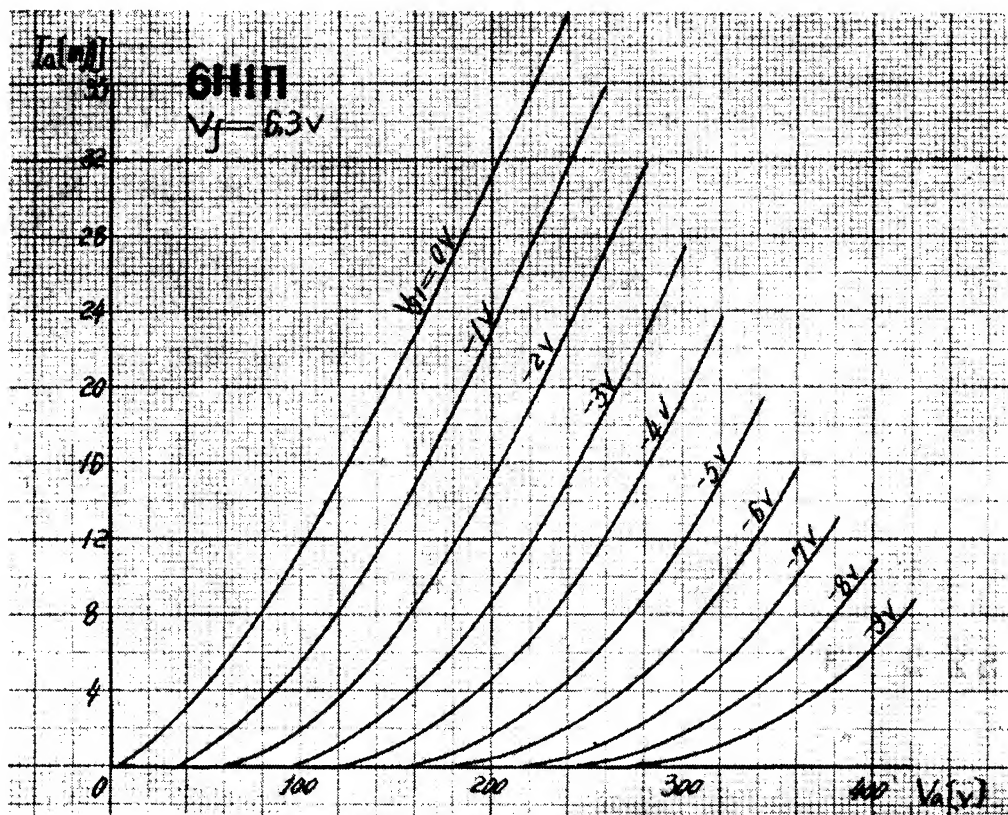
Weight: 15 g.

Mounting: Any

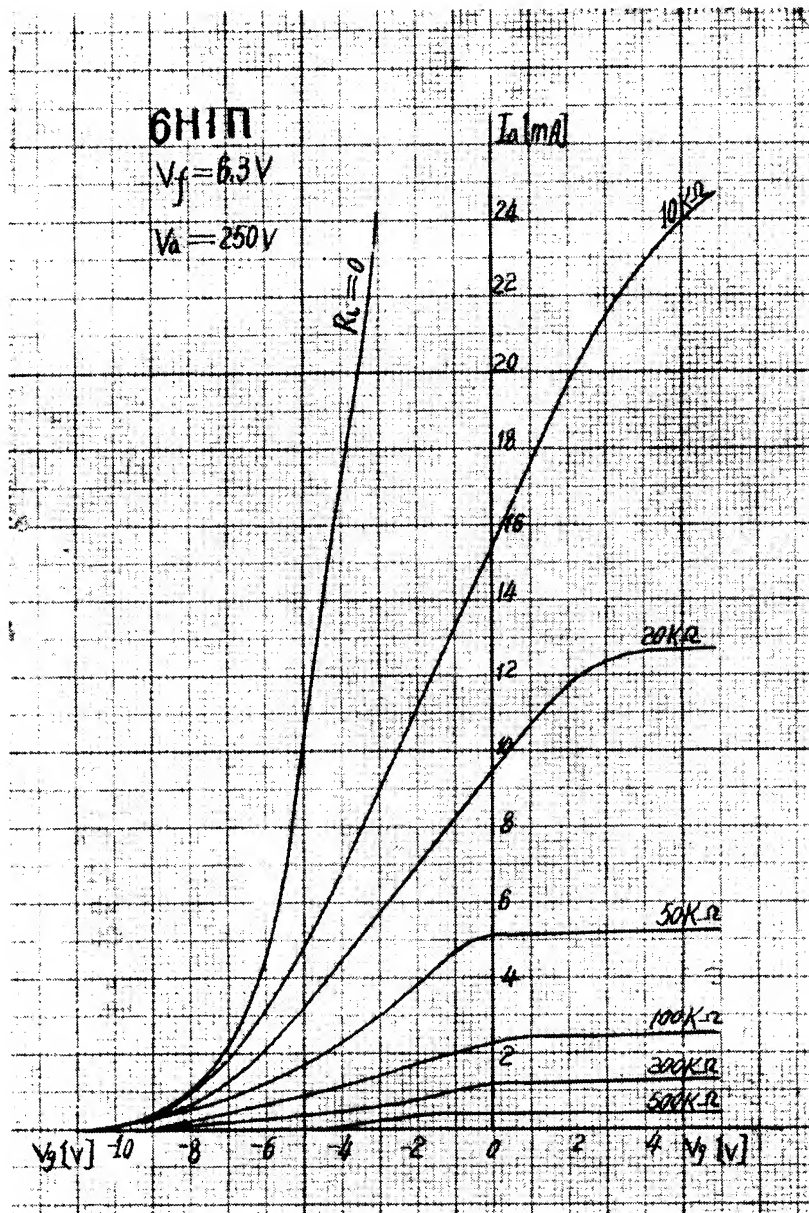


PEKING ELECTRON TUBES

6H1П



6H1П

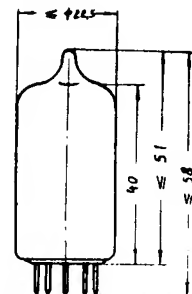
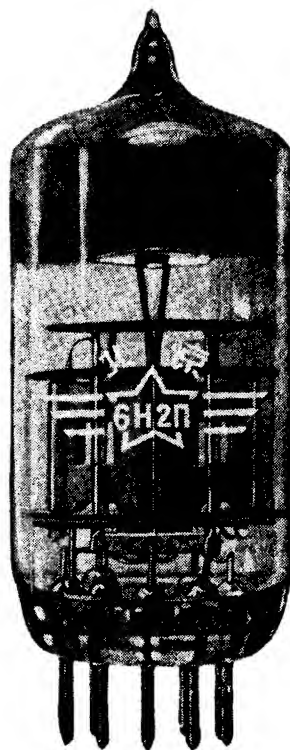


TWIN TRIODE

6H2Π

DESCRIPTION

The miniature tube PEKING 6H2Π is a high-mu twin triode with indirectly heated separate oxide cathodes, primarily intended for use as an a.f. voltage amplifier or phase inverter in a.c. mains operated equipment.



HEATER

Heater voltage
Heater current

V_h	6.3	V
I_h	340	mA

CHARACTERISTICS (each section)

Anode voltage	V_a	250	V
Grid voltage	V_g	-1.5	V
Anode current	I_a	2.3	mA
Transconductance	S	2.1	mA/V
Amplification factor	μ	97.5	
Internal resistance	R_i	46.5	K Ω

MAXIMUM RATINGS (each section)

Heater voltage	V_h	5.7—6.9	V
Anode voltage	V_a	300	V
Anode dissipation	W_a	1	W
Cathode current	I_k	10	mA
Grid circuit resistor	R_g	0.5	M Ω
Heater-cathode voltage	V_{hk}	± 100	V

PEKING ELECTRON TUBES



6H2Π

TWIN TRIODE

CAPACITANCES

Input (each section)	Ci	2.35	pF
Output (1st section)	Co ₁	2.95	pF
Output (2nd section)	Co ₂	3.15	pF
Grid to anode (each section)	Ca ₁ /a ₂	≤0.3	pF
Anode No. 1 to anode No. 2	Cg/a	≤0.7	pF

Base: Miniature 9 pin

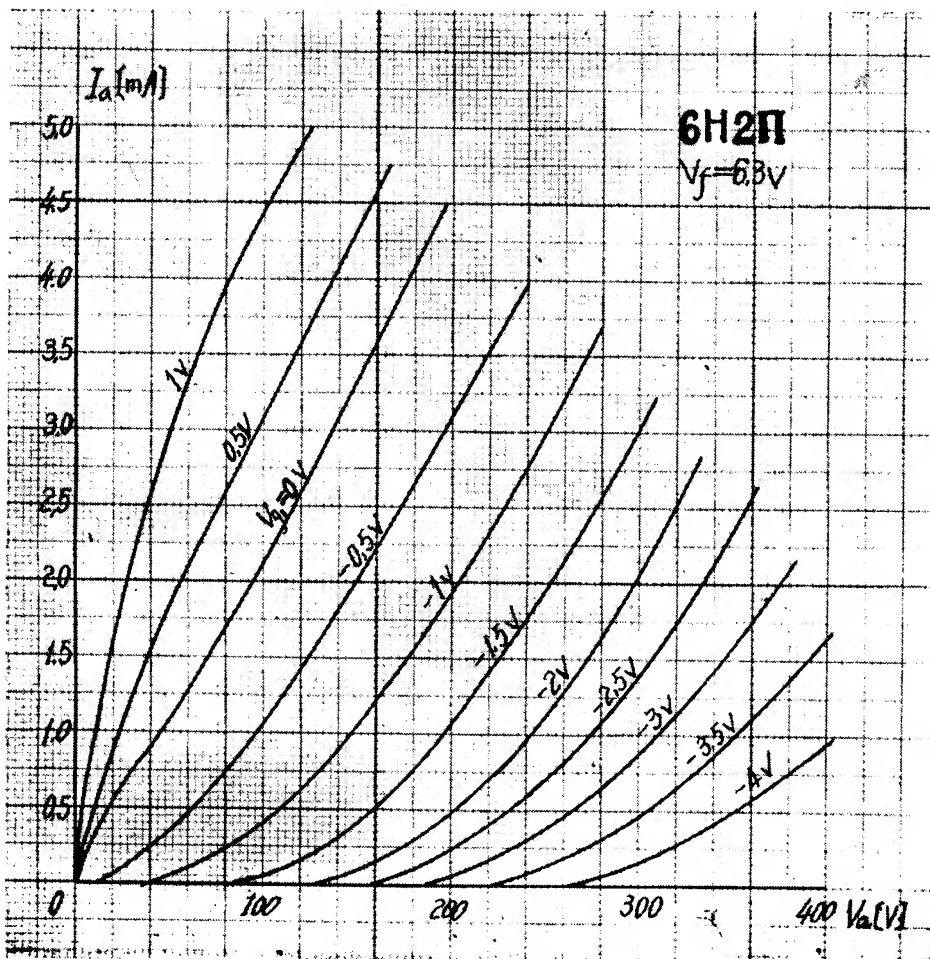
Weight: 15 g. (approx.)

Mounting: Any

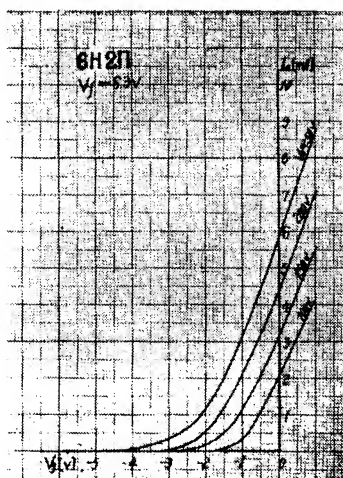
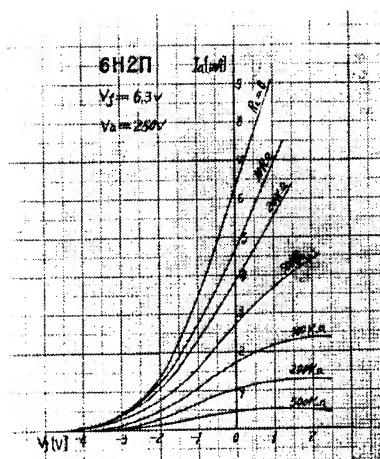


PEKING ELECTRON TUBES

6H2П



6H2П

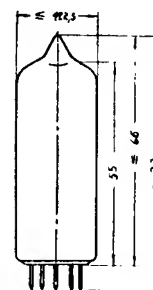
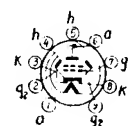


BEAM TETRODE

6П1П

DESCRIPTION

The miniature tube PEKING 6П1П is a beam tetrode with indirectly heated oxide cathode, primarily intended for use as an output power amplifier in a.c. mains operated equipment.



HEATER

Heater voltage	Vh	6.3	V
Heater current	Ih	500	mA

CHARACTERISTICS

Anode voltage	Va	250	V
Grid No. 2 voltage	Vg ₂	250	V
Grid No. 1 voltage	Vg ₁	-12.5	V
Anode current	Ia	44	mA
Grid No. 2 current	Ig ₂	≤ 7.0	mA
Transconductance	S	4.9	mA/V
Internal resistance	R _i	50	K Ω

PEKING ELECTRON TUBES



6Π1Π

BEAM TETRODE

OPERATING CONDITIONS

(As single tube class A amplifier)

Plate voltage	V_a	250	V
Grid No. 2 voltage	V_{g_2}	250	V
Grid No. 1 voltage	V_{g_1}	-12.5	V
R.M.S. input voltage	$V_{g_1} \sim$	8.8	V
Anode load resistor	R_l	5.0	K Ω
Anode current	I_a	44	mA
Grid No. 2 current	I_{g_2}	7.0	mA
Power output	W_o	4	W
Total harmonic distortion	D_{tot}	14	%

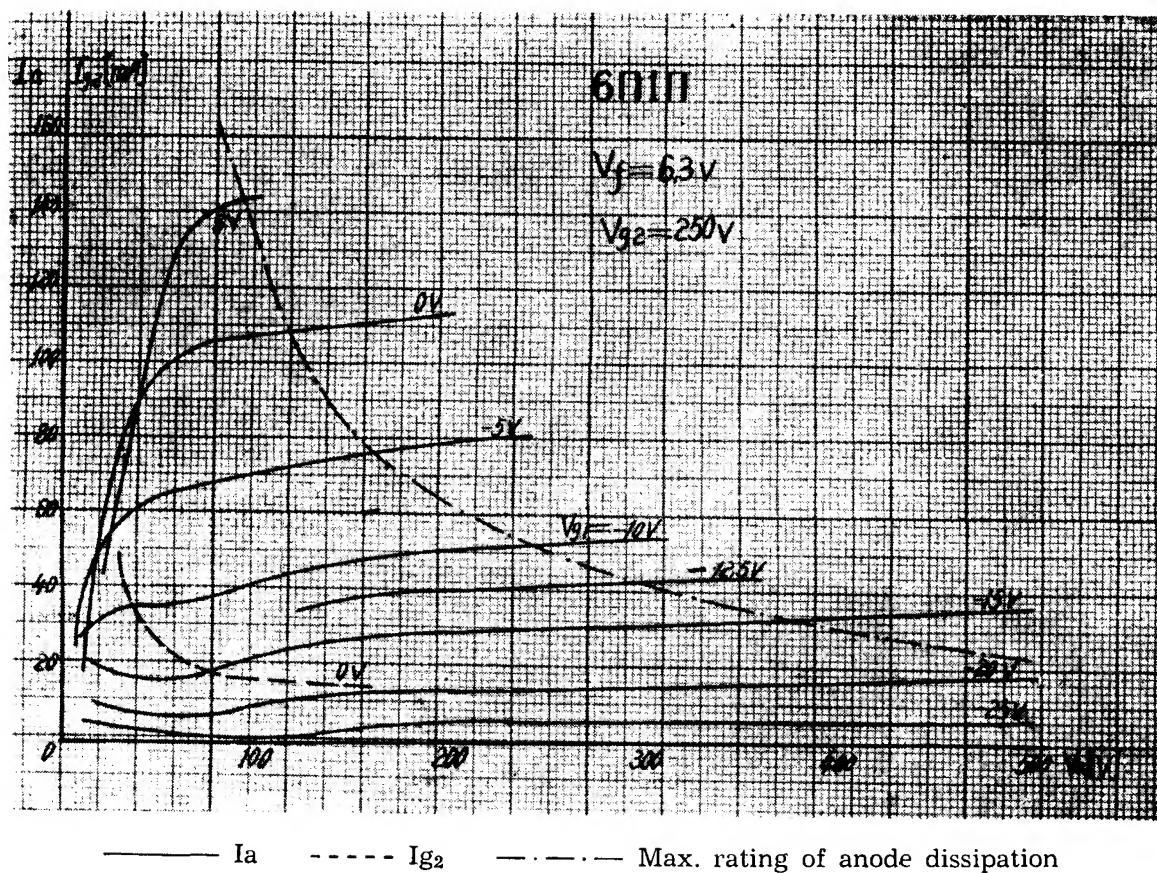
MAXIMUM RATINGS

Heater voltage	V_h	5.7—6.9	V
Anode voltage	$V_a \text{ max}$	250	V
Grid No. 2 voltage	$V_{g_2} \text{ max}$	250	V
Anode dissipation	$W_a \text{ max}$	12	W
Grid No. 2 dissipation	$W_{g_2} \text{ max}$	2.2	W
Cathode current	$I_k \text{ max}$	70	mA
Grid No. 1 circuit resistor	$R_{g_1} \text{ max}$	0.5	M Ω
Heater-cathode voltage	$V_{hk} \text{ max}$	100	V

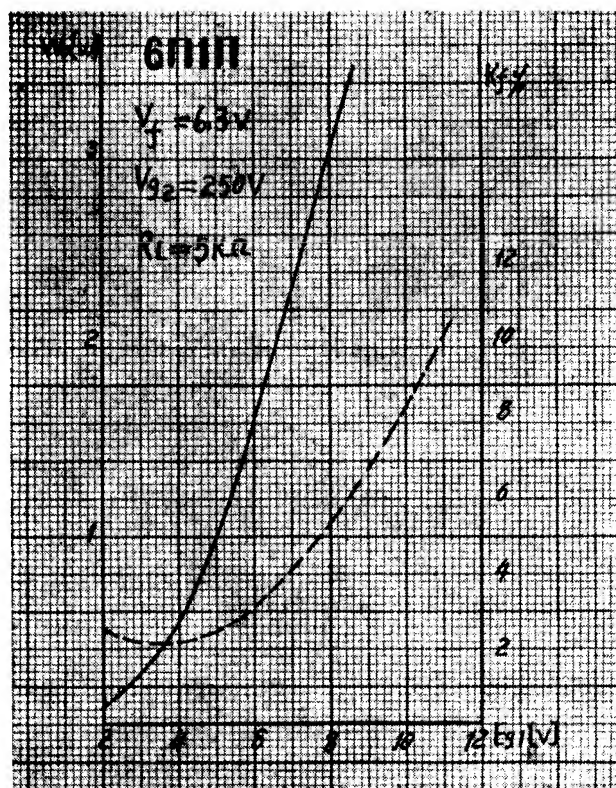
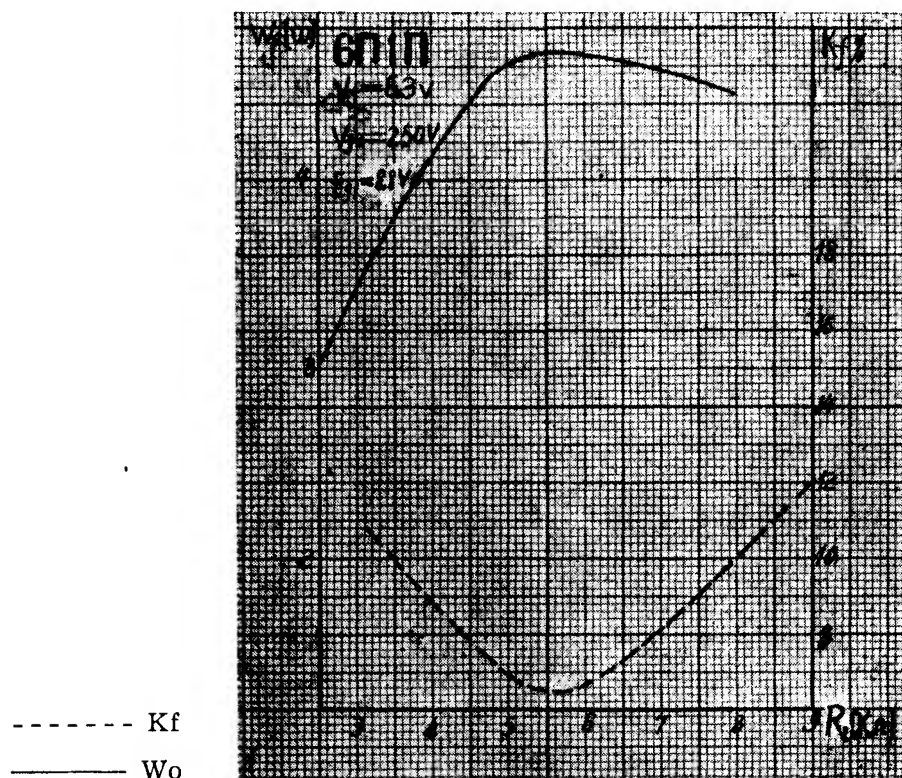
Base: Miniature 9 pin**Weight:** 16 g. (max.)**Mounting:** Any

PEKING ELECTRON TUBES

6П1П



6П1П

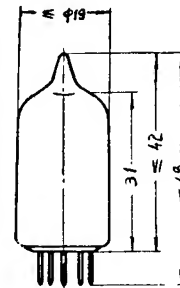
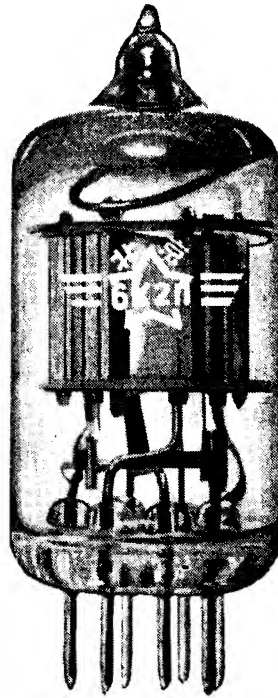


TWIN DIODE

6X2Π

DESCRIPTION

The miniature tube PEKING 6X2Π is a twin diode with indirectly heated separated oxide cathodes, primarily intended for use as a detector of a.m. or f.m. signals and suitable for low power rectifier in a.c. mains operated receivers.



HEATER

Heater voltage	V_h	6.3	V
Heater current	I_h	300	mA

CHARACTERISTICS

R.M.S. anode supply voltage	$V_a \sim$	2×150	V
Load resistor	R_l	10	KΩ
Filter capacitor	C_f	8	μF
D.C. output current	I_l	≥ 17	mA

OPERATING CONDITIONS

R.M.S. anode supply voltage	$V_a \sim$	2×100	2×125	2×150	2×170	V
Filter capacitor	C_f	8	8	8	8	μF
Minimum limiting resistor (per plate)	$R_{lim \min}$	130	250	350	430	Ω
D.C. output current	I_l	20	20	20	20	mA
D.C. output voltage	V_l	115	140	170	195	V

PEKING ELECTRON TUBES



6X2Π

TWIN DIODE

Note: The value of $R_{lim \min}$ is calculated from:

$$R_{lim \min} = R_t + R_{lim}$$

$$R_t = R_s + N^2 R_p$$

where R_t = d.c. resistance contributed at each anode of the rectifier by the transformer.

R_s = d.c. resistance of the turns on each half secondary.

R_p = d.c. resistance of the turns on primary.

N = ratio of the turns on half of the secondary to the primary, (may be taken as the voltage ratio)

R_{lim} = limiting resistor. (if R_t is less than $R_{lim \min}$, R_{lim} must be added at each anode circuit)

MAXIMUM RATINGS

Heater voltage	V_h	5.7—6.9	V
Peak inverse anode voltage	$V_{pk \max}$	450	V
D.C. output current	$I_l \max$	20	mA
Peak anode current	$I_{pk \max}$	90	mA
Heater—cathode voltage	$V_{hk \max}$	± 350	V

CAPACITANCES

Anode to cathode, heater, internal and external shield (each diode)	$C_{a/k+h+S_i+Se}$	3.4	pF
Cathode to anode, heater, internal and external shield (each diode)	$C_{k/a+h+S_i+Se}$	3.8	pF
Anode No. 1 to anode No. 2	C_{a_1/a_2}	≤ 0.03	pF
Cathode to heater	$C_{k/h}$	≤ 4	pF

Base: Miniature 7 pin

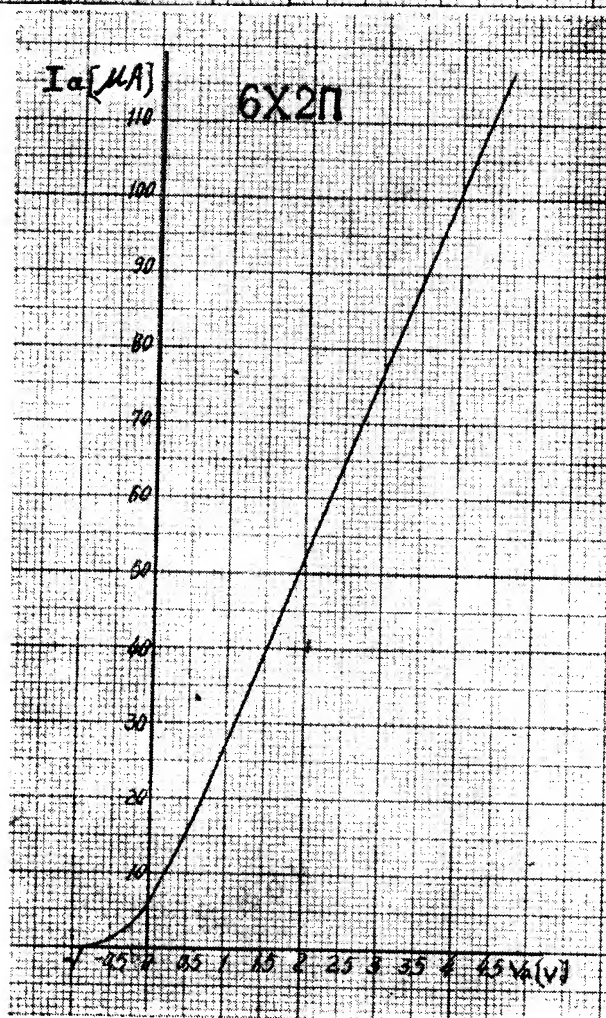
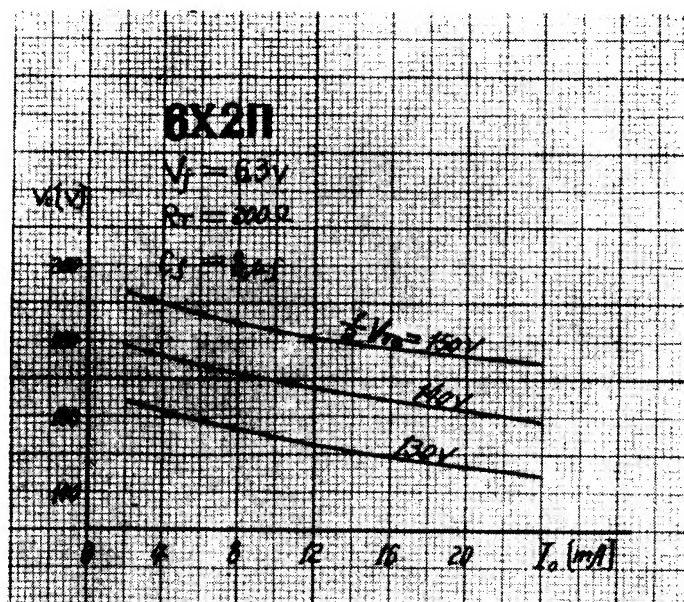
Weight: 10 g. (max.)

Mounting: Any

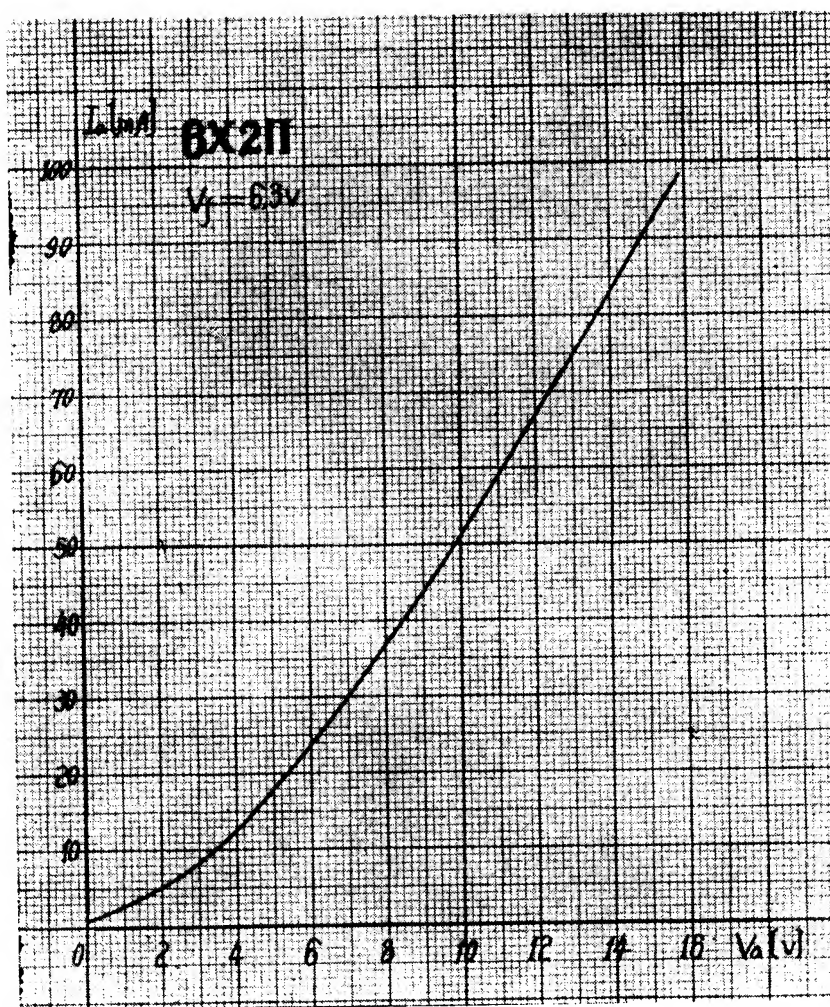


PEKING ELECTRON TUBES

6X2Π



6X2Π

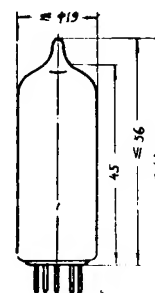
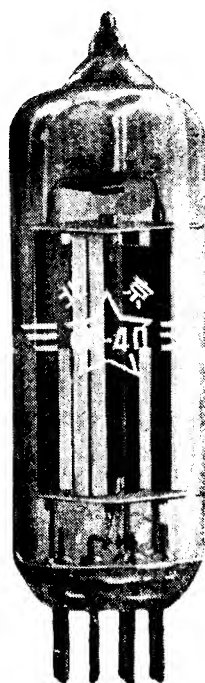


FULL-WAVE RECTIFIER

6Ц4П

DESCRIPTION

The miniature tube PEKING 6Ц4П is a full-wave rectifier with indirectly heated oxide cathode designed as power rectifier for use in a.c. mains operated receivers.



HEATER

Heater voltage	V_h	6.3	V.
Heater current	I_h	600	mA

CHARACTERISTICS

R.M.S. anode supply voltage	$V_a \sim$	2×350	V
Load resistor	R_l	5200	Ω
Filter capacitor	C_f	8	μF
D.C. output current	I_l	≥ 72	mA

OPERATING CONDITIONS

R.M.S. anode supply voltage	$V_a \sim$	2×200	2×300	2×350	2×400	V
Filter capacitor	C_f	8	8	8	8	μF
Minimum limiting resistor (per plate)	$R_{lim \min}$	100	200	300	400	Ω
D.C. output current	I_l	75	75	75	75	mA
D.C. output voltage	V_l	205	310	360	415	V

PEKING ELECTRON TUBES



6Ц4П FULL-WAVE RECTIFIER

Note: The value of $R_{lim \min}$ is calculated from:

$$R_{lim \min} = R_t + R_{lim}$$

$$R_t = R_s + N^2 R_p$$

where R_t = d.c. resistance contributed at each anode of the rectifier by the transformer.

R_s = d.c. resistance of the turns on each half secondary.

R_p = d.c. resistance of the turns on primary.

N = ratio of the turns on half of the secondary to the primary, (may be taken as the voltage ratio)

R_{lim} = limiting resistor. (if R_t is less than $R_{lim \min}$, R_{lim} must be added at each anode circuit)

MAXIMUM RATINGS

Heater voltage	V_h	5.7—6.9	V
Peak inverse anode voltage	$V_{pk \max}$	1000	V
D.C. output current	$I_l \max$	75	mA
Peak anode current	$I_{pk \max}$	300	mA
Heater-cathode voltage	$V_{hk \max}$	±400	V

Base: Miniature 7 pin

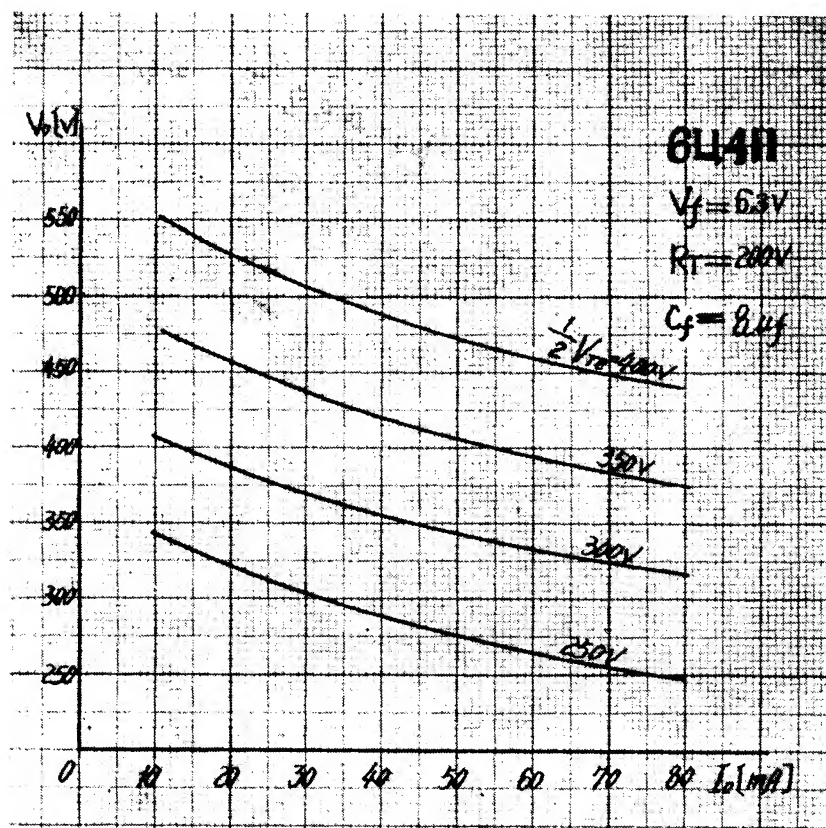
Weight: 10 g. (max.)

Mounting: Any

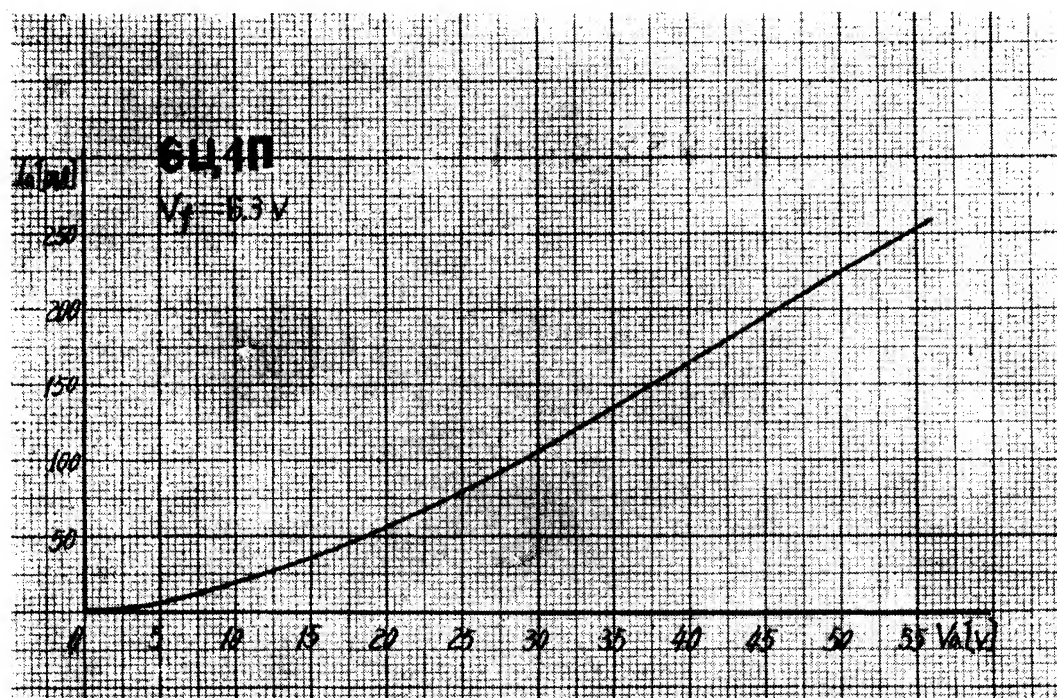


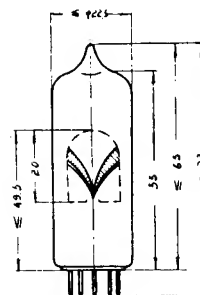
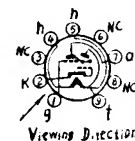
PEKING ELECTRON TUBES

6Ц4П



6Ц4П





Heater voltage	V_h	6.3	V
Heater current	I_h	300	mA

Anode voltage	V_a	100	V
Target voltage	V_{tg}	250	V
Grid voltage	V_g	-2	V
Anode current	I_a	2	mA
Target current	I_{tg}	< 4	mA



6E1Π

TUNING INDICATOR

OPERATING CONDITIONS

H.T. line voltage	$V_{h.t.}$	250	V
Target voltage	V_{tg}	250	V
Anode load resistor	R_l	0.5	$M\Omega$
Grid circuit resistor	R_{g1}	0.1	$M\Omega$
Target current	T_{tg}	<4	mA
Grid voltage:			
for maximum shadow angle	$V_g \text{ max}$	0	V
for minimum shadow angle	$V_g \text{ min}$	-15	V

MAXIMUM RATINGS

Heater voltage	V_h		
Anode voltage	$V_a \text{ max}$	250	V
Target voltage (max.)	$V_{tg} \text{ max}$	250	V
Target voltage (min.)	$V_{tg} \text{ min}$	150	V
Anode dissipation	$W_a \text{ max}$	0.2	W
Grid circuit resistor	$R_g \text{ max}$	3	$M\Omega$
Heater—cathode voltage	$V_{hk} \text{ max}$	± 100	V

Base: Miniature 9 pin

Weight: 14 g. (max.)

Mounting: Any



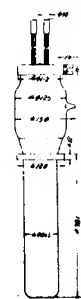
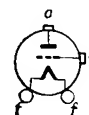
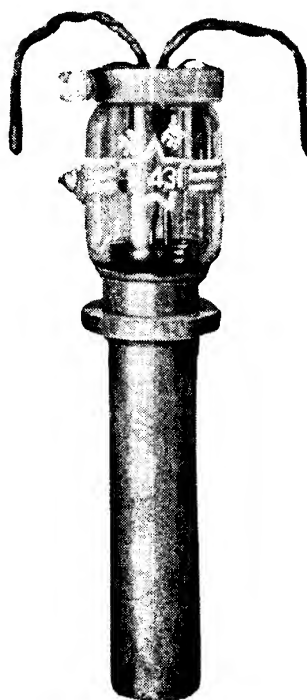
PEKING ELECTRON TUBES

TRIODE

Г-431

DESCRIPTION

The transmitting tube PEKING Г-431 is a water and forced-air cooled triode with directly heated tungsten filament and is designed for an anode dissipation of 20 kw. It can be employed as high-power broadcast and industrial h.f. heating application.



FILAMENT

Filament voltage	V_f	22	V
Filament current	I_f	102	A

CHARACTERISTICS

Filament cold resistance	R_f	0.018	Ω
Cathode emission	I_k	12	A
Transconductance (5kv/3A)	S	12	mA/V
Amplification factor (5 & 10kv/1A)	μ	50	
Normal power output of frequency up to 6 MC/S	W_o	30	KW

PEKING ELECTRON TUBES



Γ-431

TRIODE

MAXIMUM RATINGS

Filament voltage	V _f max	22	V
Filament starting current	I _f st. max	155	A
Anode voltage:			
at frequency up to 6 MC/S	V _a max	15	KV
at frequency up to 12 MC/S	V _a max	11	KV
at frequency up to 25 MC/S	V _a max	7.5	KV
Anode dissipation	W _a max	20	KW
Frequency	f max	25	MC/S

CAPACITANCES

Input	C _i	25	pF
Output	C _o	1.5	pF
Grid to anode	C _{g/a}	23	pF

COOLING

Anode: by circulating water, 30 liters/min

Buld: by forced air, 80 m³/hour

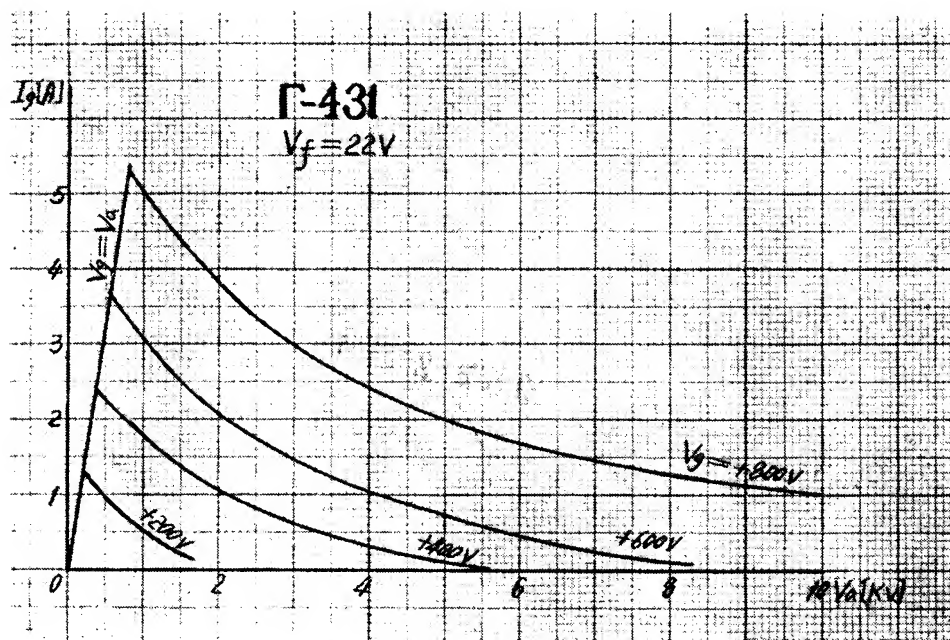
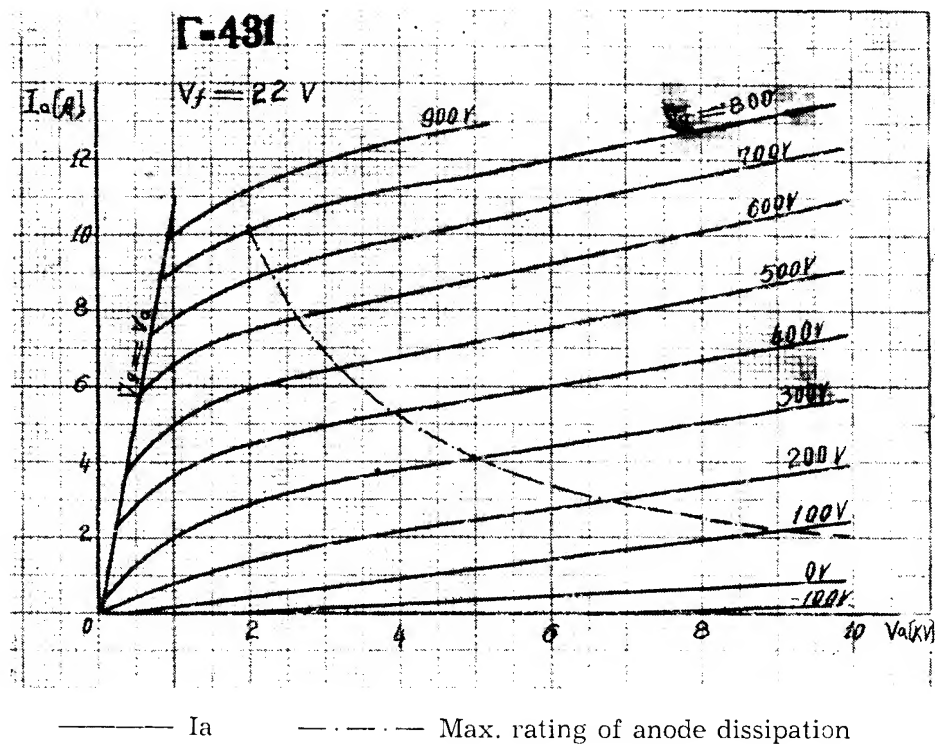
Weight: 5 kgs. (max.)

Mounting: Vertical, anode down

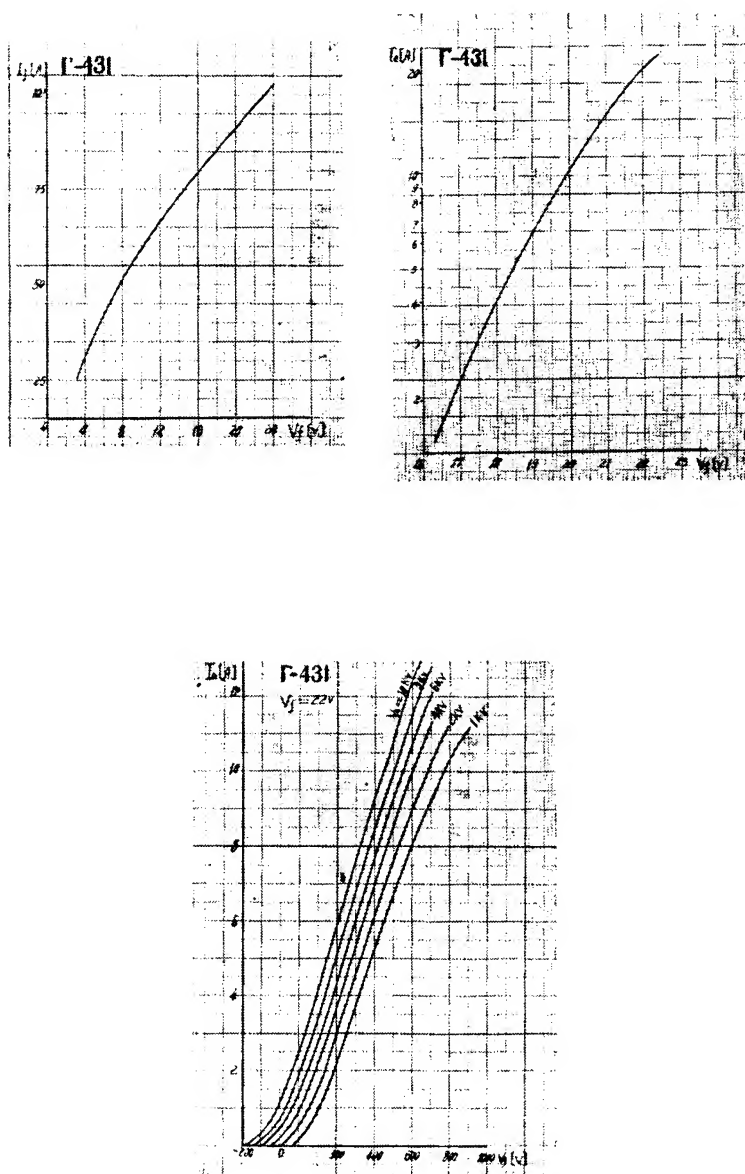


PEKING ELECTRON TUBES

Г-431



Г-431

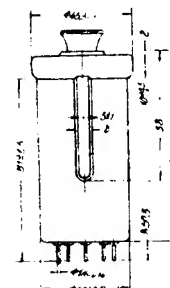
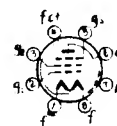
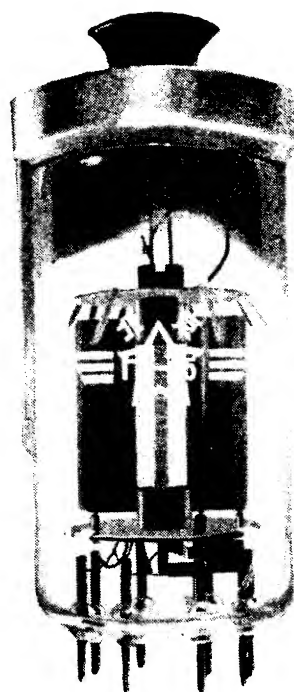


PENTODE

ГУ-15

DESCRIPTION

The transmitting tube PEKING ГУ-15 is a h.f. pentode with centre-tapped directly heated oxide filament, and designed for use as h.f. power amplifier or oscillator for frequencies up to 60 MC/S.



FILAMENT

Filament voltage	V_f	4.4	V
Filament current	I_f	0.68	A

CHARACTERISTICS

Anode voltage	V_a	220	V
Grid No. 3 voltage	V_{g_3}	0	V
Grid No. 2 voltage	V_{g_2}	200	V
Grid No. 1 voltage	V_{g_1}	-14	V
Anode current	I_a	50	mA
Grid No. 2 current	I_{g_2}	<7.5	mA
Transconductance	S	4.7	mA/V
Grid No. 1 voltage (at $I_a=2$ mA)	V_{g_1}'	-31	V

PEKING ELECTRON TUBES



ГY-15**PENTODE****OPERATING CONDITIONS**

For Clacc C Amplifier

Anode voltage	V_a	350	V
Grid No. 3 voltage	V_{g_3}	200	V
Grid No. 2 voltage	V_{g_2}	200	V
Grid No. 1 voltage	V_{g_1}	-25	V
R.M.S. grid No. 1 exciting voltage	$V_{g_1 \sim}$	26	V
Total cathode current	I_k	≤ 85	mA
Grid No. 1 current	I_{g_1}	≤ 1.5	mA
Grid No. 2 current	I_{g_2}	≤ 13	mA
Power output	W_o	> 12	W
Frequency	f	6	MC/S

MAXIMUM RATINGS

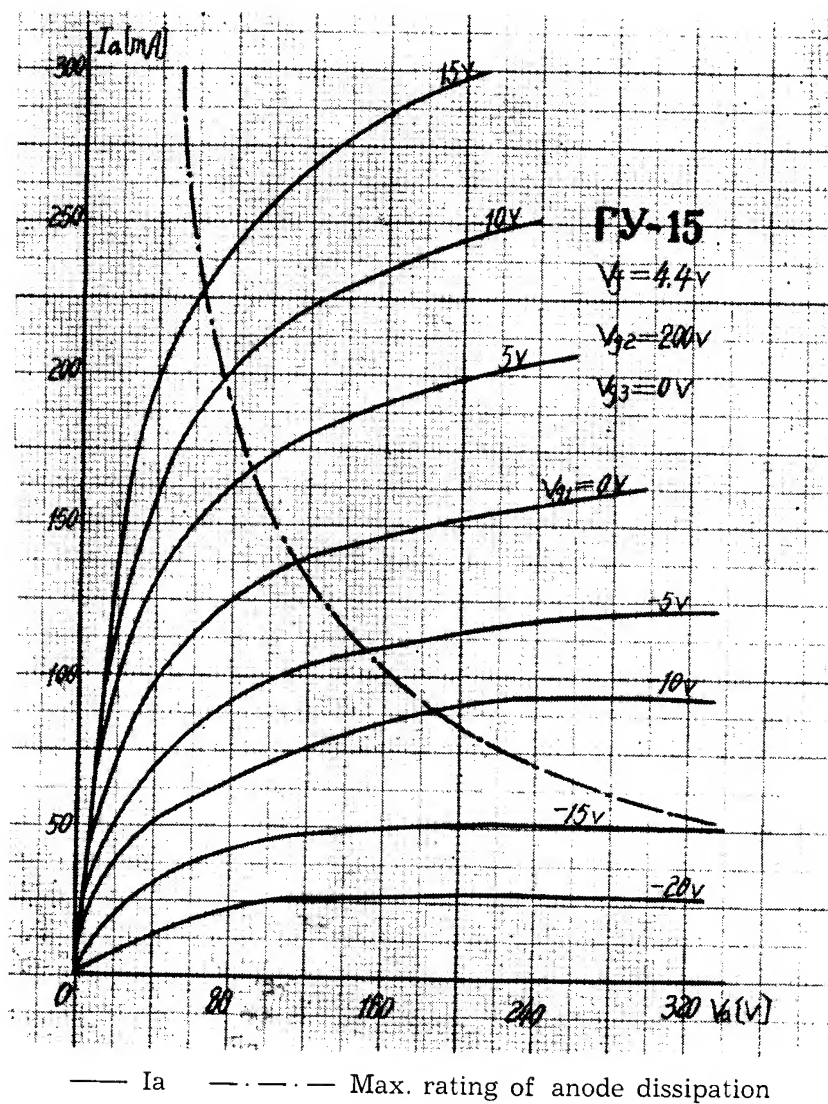
Filament voltage	V_f	4.0—4.8	V
Anode voltage	$V_a \text{ max}$	400	V
Grid No. 2 voltage	$V_{g_2} \text{ max}$	250	V
Anode dissipation	$W_a \text{ max}$	15	W
Grid No. 2 dissipation	$W_{g_2} \text{ max}$	4	W
Grid No. 1 dissipation	$W_{g_1} \text{ max}$	0.4	W
Total cathode current	$I_k \text{ max}$	85	mA
Frequency	$f \text{ max}$	60	MC/S

CAPACITANCES

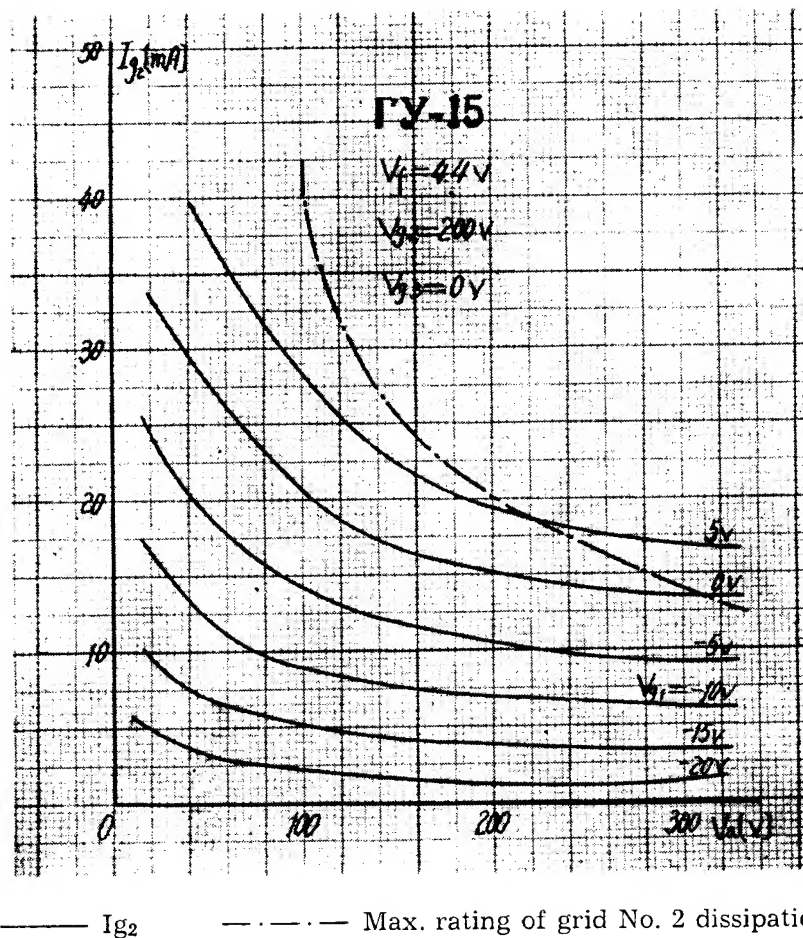
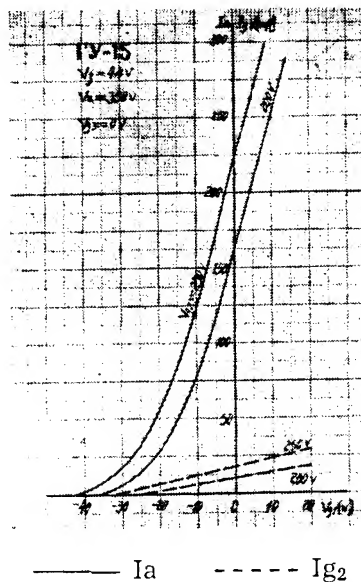
Input	C_i	10.5	pF
Output	C_o	12.5	pF
Grid No. 1 to plate	$C_{g_1/a}$	< 0.16	pF

Base: Special 8-pin. (See drawing)**Weight:** 100 gs. (max.)**Mounting:** Vertical, base down**PEKING ELECTRON TUBES**

ГУ-15



ГУ-15

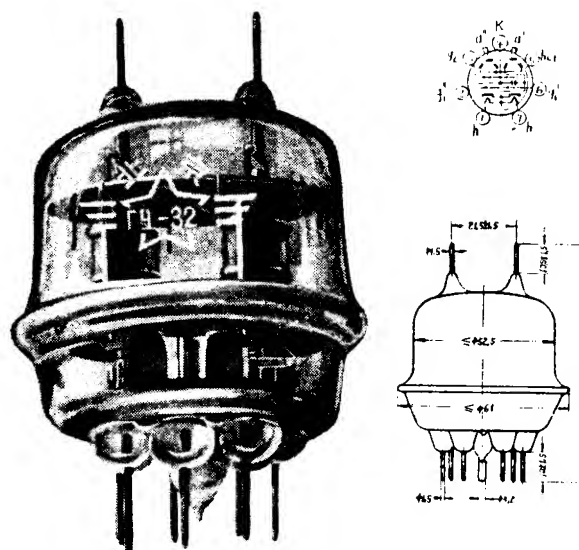


TWIN TETRODE

ГY-32

DESCRIPTION

The transmitting tube PEKING ГY-32 is a u.h.f. twin-unit beam power tetrode with a indirectly heated oxide cathode, centre-tapped heater, and two carbonized nickel anodes. Particularly suitable for class C amplifier telegraph or plate-modulation telephone at u.h.f.



HEATER

		Series	Parallel	
Heater voltage	V_h	12.6	6.3	V
Heater current	I_h	0.8	1.6	A

CHARACTERISTICS (Each unit)

Anode voltage	V_a	250	V
Grid No. 2 voltage	V_{g_2}	130	V
Grid No. 1 voltage	V_{g_1}	-10	V
Anode current	I_a	30	mA
Grid No. 1 current	I_{g_1}	<5.5	mA
Transconductance	S	3.5	mA/V
Amplification factor (g_1 to g_2)	μ	7	

Note: With grid No. 1 voltage of -100 volts on unit not under test.

PEKING ELECTRON TUBES



ГY-32**TWIN TETRODE****TYPICAL OPERATION**

For push-pull self-excited oscillator

Anode voltage	V_a	400	V
Grid No. 2 voltage	V_{g_2}	250	V
Total Anode current	I_a	90	mA
Total Grid No. 2 current	I_{g_2}	<11	mA
Total Grid No. 1 current	I_{g_1}	2 to 6	mA
Grid No. 1 circuit resistor	V_{g_1}	8 to 18	$K\Omega$
Frequency	f	200	MC/S

MAXIMUM RATINGS

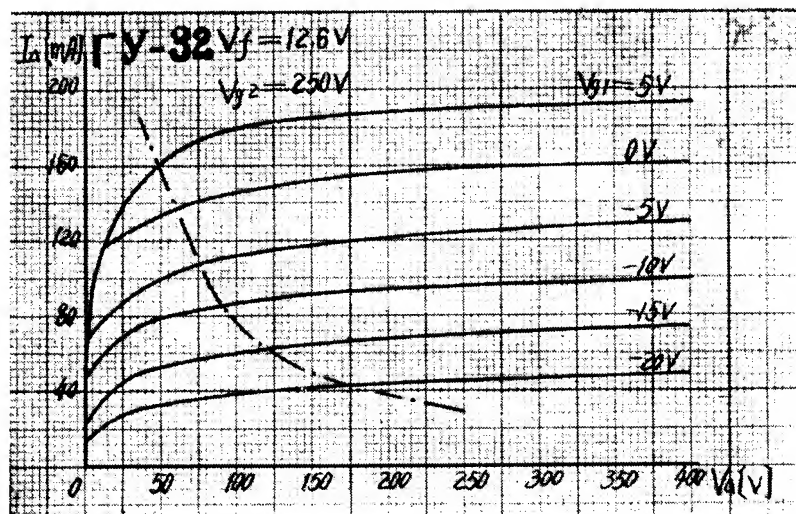
		Series	Parallel	
Heater voltage	V_h	11.4—14	5.7—7.0	V
Anode voltage	V_a max		500	V
Grid No. 2 voltage	V_{g_2} max		250	V
Anode dissipation	W_a max		15	W
Grid No. 2 dissipation	W_{g_2} max		5	W
Heater—cathode voltage	V_{hk} max		100	V
Frequency	I_k max		200	MC/S
Bulb temperature	T_b max		200°	C

CAPACITANCES

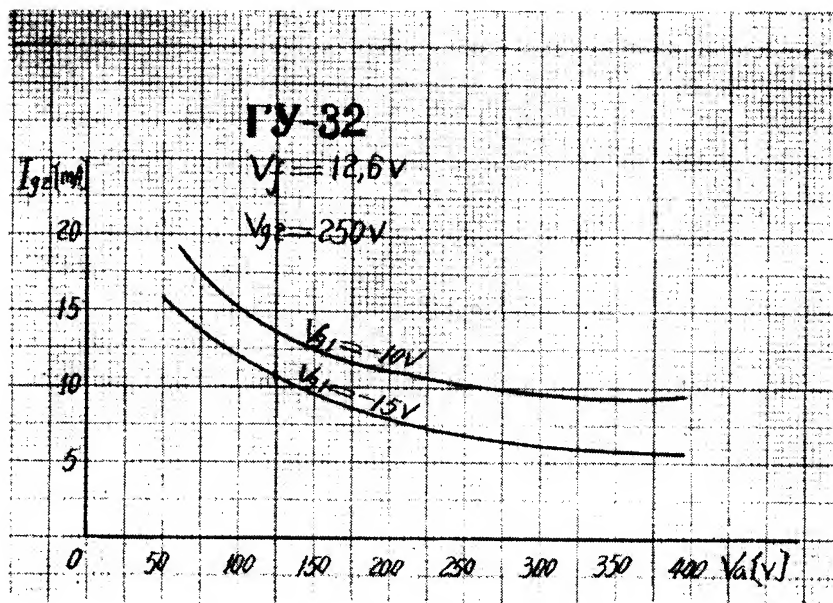
Input	C_i	7.8	pF
Output	C_o	3.8	pF
Grid No. 1 to plate	$C_{g_1/a}$	<0.05	pF

Base: Medium Molded-Flare 7-pin**Weight:** 100 g. (max.)**Mounting:** Any.**PEKING ELECTRON TUBES**

ГУ-32

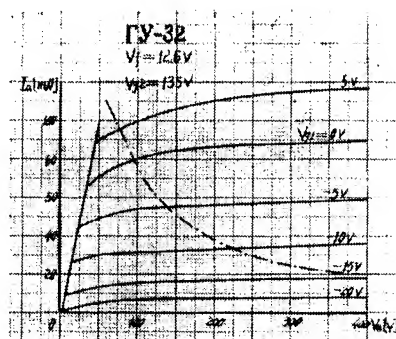


———— I_a — — — — — Max. rating of anode dissipation
(Each unit)

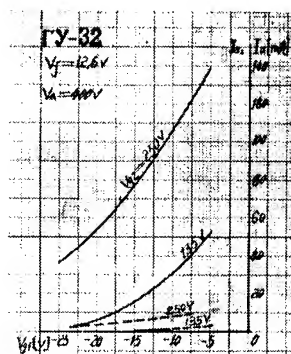


(Each unit)

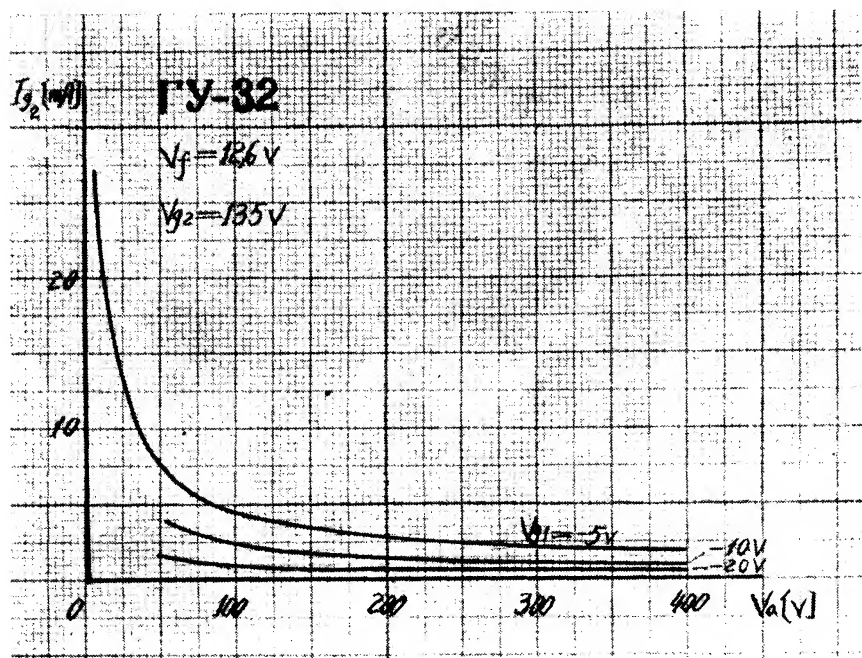
$\Gamma Y-32$



— I_a — · — · Max. rating of
 anode dissipation
 (Each unit)



— I_a — · — · I_{g2}
 (Each unit)



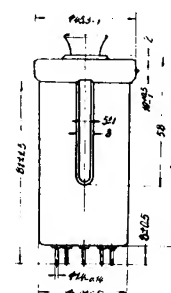
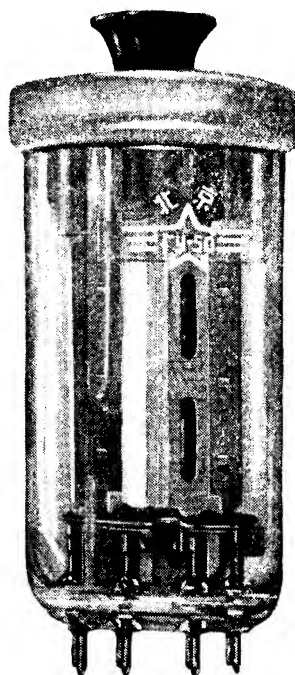
(Each unit)

PENTODE

ГУ-50

DESCRIPTION

The transmitting tube PEKING ГУ-50 is a h.f. pentode with indirectly heated oxide cathode and a zirconium coated nickel anode. Specially designed for compact marine wireless equipment, and suitable for suppressor-modulated h.f. amplifier.



HEATER

Heater voltage	V_h	12.6	V
Heater current	I_h	0.765	A

CHARACTERISTICS

Anode voltage	V_a	800	V
Grid No. 3 voltage	V_{g_3}	0	V
Grid No. 2 voltage	V_{g_2}	250	V
Grid No. 1 voltage	V_{g_1}	-40	V
Anode current	I_a	50	mA
Transconductance	S	4	mA/V
Amplification factor (g_1 to g_2)	μ	5.3	

TYPICAL OPERATION

For Class C Amplifier

Anode voltage	V_a	800	V
Grid No. 3 voltage	V_{g_3}	0	V
Grid No. 2 voltage	V_{g_2}	250	V
Grid No. 1 voltage	V_{g_1}	-100	V

PEKING ELECTRON TUBES



ГУ-50**PENTODE**

Peak exciting grid No. 1 voltage	V_{g_1}	135	V
Anode current	I_a	≤ 150	mA
Grid No. 2 current	I_{g_2}	≤ 20	mA
Grid No. 1 current	I_{g_1}	≤ 3	mA
Power output	W_o	> 60	W
Frequency	f	66.6	MC/S

MAXIMUM RATINGS

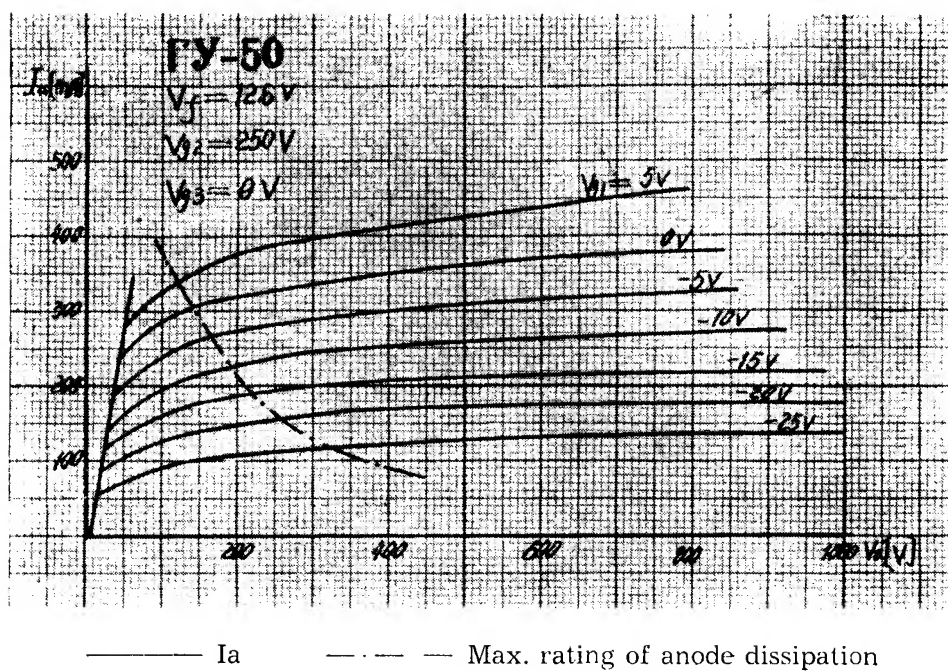
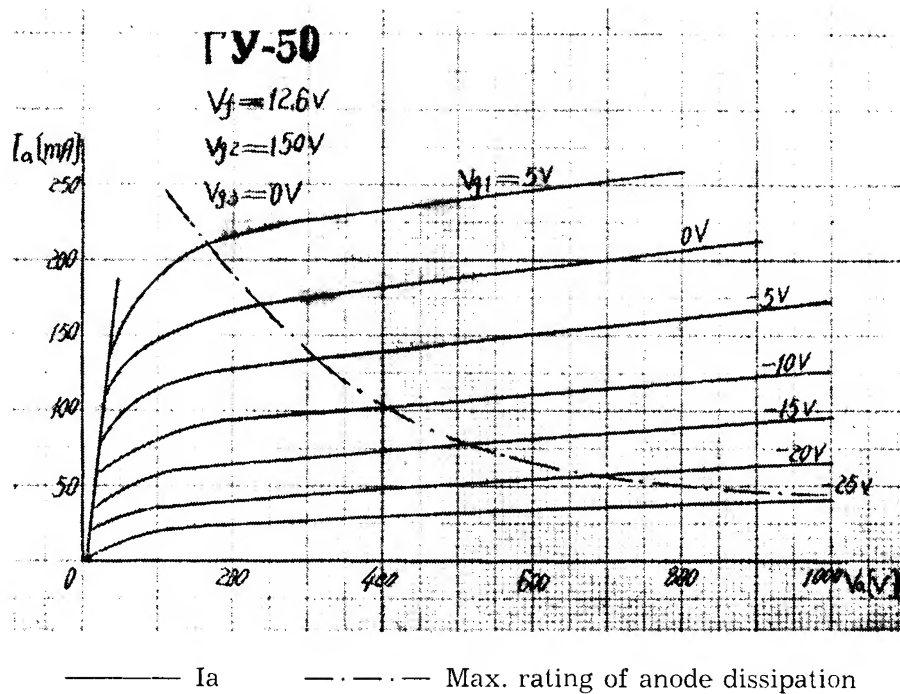
Heater voltage	V_h	10.8—14.5	V
Anode voltage:			
at frequency up to 46.1 MC/S	V_a max	1000	V
at frequency up to 66.6 MC/S	V_a max	800	V
at frequency up to 85.7 MC/S	V_a max	700	V
at frequency up to 120 MC/S	V_a max	600	V
Peak anode voltage	V_{ap} max	3000	V
Grid No. 2 voltage	V_{g_2} max	250	V
Anode dissipation	W_a max	40	W
Grid No. 2 dissipation	W_{g_2} max	5	W
Grid No. 1 dissipation	W_{g_1} max	1	W
Heater—cathode voltage	V_{hk}	200	V
Cathode current	I_k max	230	mA
Circuit resistance between cathode and heater	R_{hk} max	5	K Ω
Blub temperature	T_b max	200°	C

CAPACITANCES

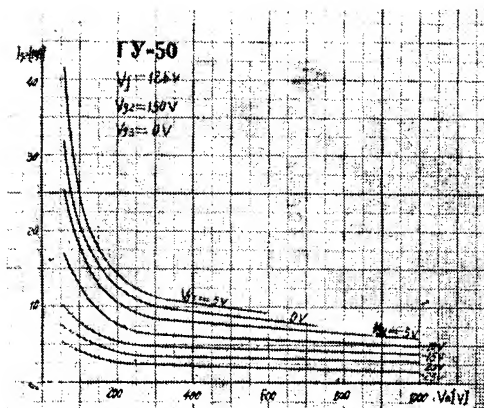
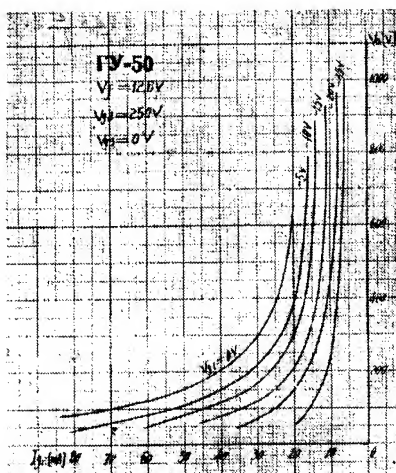
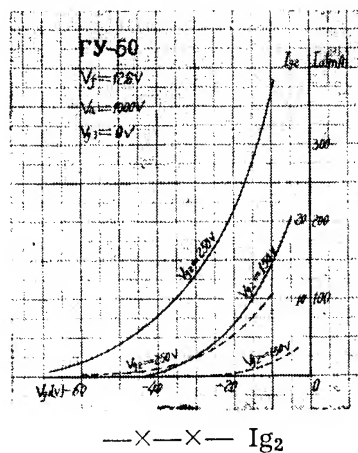
Input	C_i	14	pF
Output	C_o	9.15	pF
Grid No. 1 to anode	$C_{g_1/a}$	0.1	pF

Base: Special 8-pin (see drawing)**Weight:** 100 g. (max.)**Cooling:** Radiation**Mounting:** Vertical, base down.**PEKING ELECTRON TUBES**

ГУ-50



ГY-50

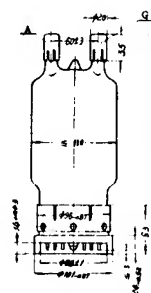
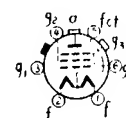
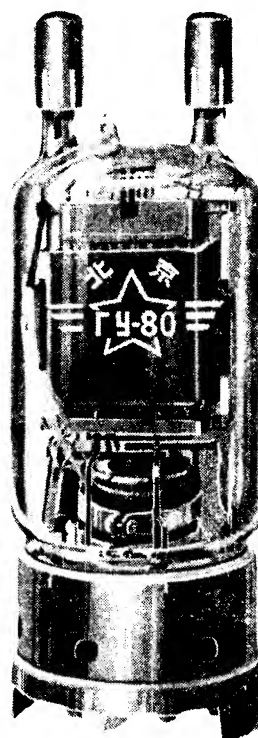


PENTODE

ГУ-80

DESCRIPTION

The transmitting tube PEKING ГУ-80 is a high efficiency h.f. power pentode with a directly heated carbonized thoriated tungsten filament and a ruggedly constructed zirconium coated graphite anode. Specially designed for the last stage amplifier of the marine wireless equipment and the excitation of the large wireless equipment, and also excellent as suppressor-modulated amplifier.



FILAMENT

Filament voltage	12.6	V
Filament current	< 10.5	A

CHARACTERISTICS

Anode voltage	Va	2000	V
Grid No. 3 voltage	Vg ₃	0	V
Grid No. 2 voltage	Vg ₂	600	V
Grid No. 1 voltage	Vg ₁	-140	V
Anode current	Ia	200	mA
Transconductance	S	5.5	m/AV
Amplification factor (g ₁ to g ₂)	μ	3.2	

PEKING ELECTRON TUBES



ГY-80**PENTODE****TYPICAL OPERATION**

For Class C Amplifier

Anode voltage	Va	2000	V
Grid No. 3 voltage	Vg ₃	0	V
Grid No. 2 voltage	Vg ₂	600	V
Grid No. 1 voltage	Vg ₁	-200	V
Peak exciting grid No. 1 voltage	Vg ₁ ~	300	V
Anode current	Ia	605 ± 75	mA
Grid No. 2 current	Ig ₂	<200	mA
Grid No. 1 current	Ig ₁	<20	mA
Power output	Po	>675	W
Frequency	f	12	MC/S

MAXIMUM RATINGS

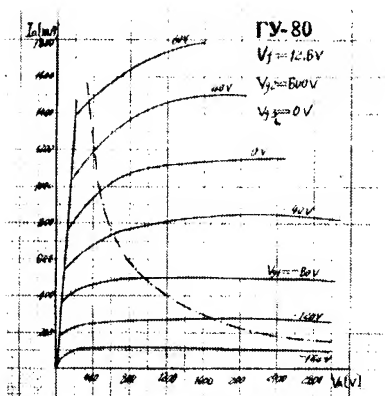
Filament voltage	V _f	11.8—13.4	V
Anode voltage:			
at frequency up to 6 MC/S	Va max	3000	V
at frequency up to 24 MC/S	Va max	2500	V
at frequency up to 50 MC/C	Va max	1500	V
Peak Grid No. 2 voltage	Vg ₂ max	1200	V
Anode dissipation	Wa max	450	W
Grid No. 2 dissipation	Wg ₂ max	120	W
Grid No. 1 dissipation	Wg ₁ max	10	W
Bulb temperature	Tb max	350°	C

CAPACITANCES

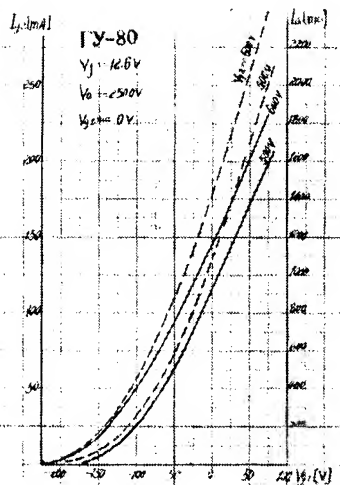
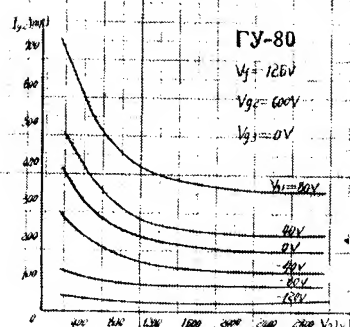
Input	Ci	28.5	pF
Output	Co	22.5	pF
Grid No. to anode	Cg ₁ /a	<0.5	pF
Grid No. 1 grid No. 3	Cg ₁ /g ₃	45	pF

Base: Special 6-pin (see drawing)**Weight:** 1 kgs. (max.)**Cooling:** Radiation**Mounting:** Vertical only, base down.**PEKING ELECTRON TUBES**

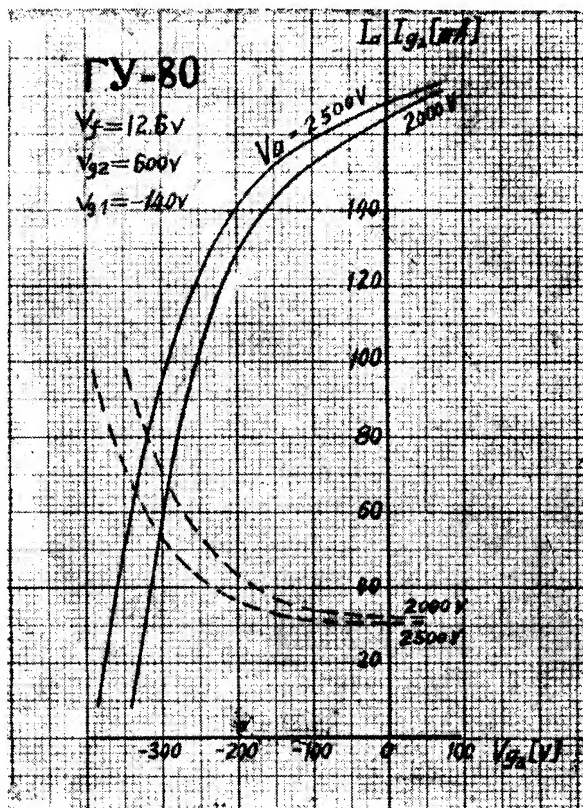
ГУ-80



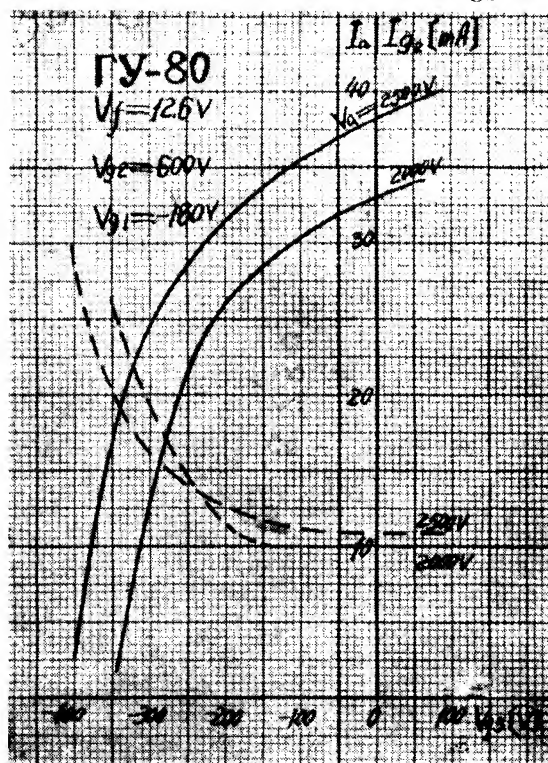
— I_a — — — — — Max. rating of anode dissipation



— I_a — — — — — I_{g2}

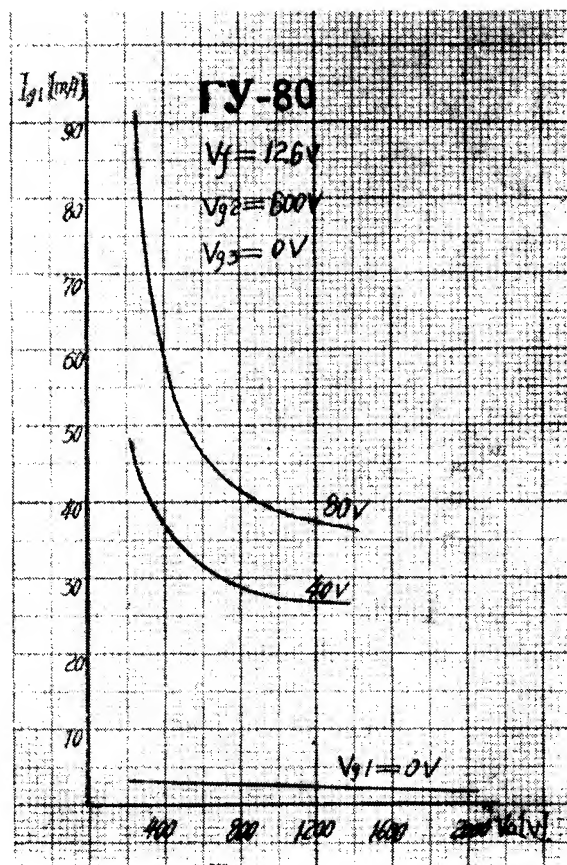
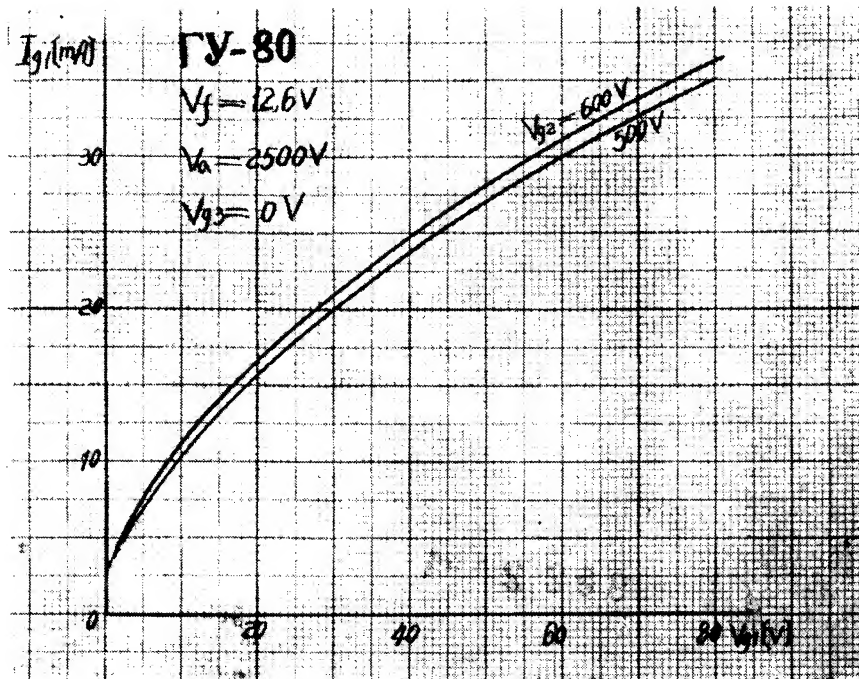


— I_a — — — — — I_{g2}



— I_a — — — — — I_{g2}

ГУ-80

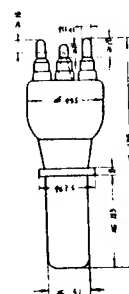
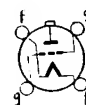


TRIODE

ГY-89A

DESCRIPTION

The transmitting tube PEKING ГY-89A is a water and forced-air cooled triode with directly heated tungsten filament and designed for an anode dissipation of 5 k.w. It can be employed as h.f. amplifier and oscillator for frequency up to 100 Mc/s as well as a.f. amplifier and modulator.



FILAMENT

Filament voltage	V_f	11	V
Filament current	I_f	124	A

CHARACTERISTICS

Filament cold resistance	R_f	0.0083	Ω
Cathode emission	I_k	9	A
Transconductance (1.6KV/3A)	S	10	mA/V
Amplification factor (3 & 5 KV/1A)	μ	20	
Normal power output at frequency up to 25 MC/S	W_o	10	KW

PEKING ELECTRON TUBES



ГY-89A

TRIODE

MAXIMUM RATINGS

Filament voltage	V _f max	11	V
Filament starting current	I _f st. max	185	A
Anod voltage			
at frequency up to 25 MC/S	V _a max	8.5	KV
at frequency up to 75 MC/S	V _a max	7	KV
at frequency up to 100 MC/S	V _a max	6	KV
Anode dissipation	W _a max	5	KW
Grid dissipation	W _g max	300	W
Frequency	f max	100	MC/S

CAPACITANCES

Input	C _i	23.3	pF
Output	C _o	3.0	pF
Grid to anode	C _{g/a}	17.5	pF

COOLING

Anode: by circulating water, 24 liters/min

Buld: by forced air, 40 m³/hour

Weight: 1.2 gks. (max.)

Mounting: vertical, anode down.

Note: Curves for the ГY-89A are the same as those for type ГY-89Б



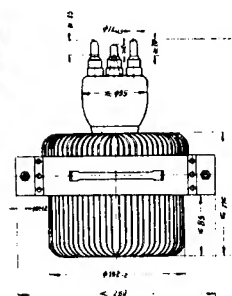
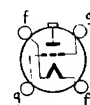
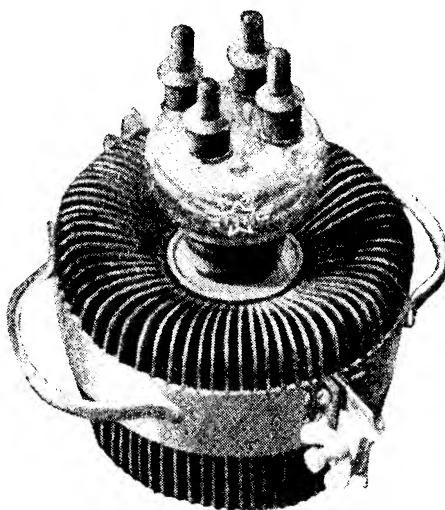
PEKING ELECTRON TUBES

TRIODE

ГУ-89Б

DESCRIPTION

The transmitting tube PEKING ГУ-89Б is a forced-air cooled triode with directly heated tungsten filament and is designed for an anode dissipation of 5 kw. It can be employed as h.f. amplifier and oscillator for frequency up to 100 Mc/s as well as a.f. amplifier and modulator.



FILAMENT

Filament voltage	V_f	11	V
Filament current	I_f	124	A

CHARACTERISTICS

Filament cold resistance	R_f	0.0083	Ω
Cathode emission	I_k	9	A
Transconductance (1.6 KV/3A)	S	10	ma/V
Amplification factor (3 & 5 KV/1A)	μ	20	
Normal power output at frequency up to 25 MC/S	W_o	10	KW

PEKING ELECTRON TUBES



ГУ-89Б

TRIODE

MAXIMUM RATINGS

Filament voltage	V_f max	11	V
Filament starting current	I_f st. max	185	A
Anode voltage:			
at frequency up to 25 MC/S	V_a max	8.5	KV
at frequency up to 75 MC/S	V_a max	7	KV
at frequency up to 100 MC/S	V_a max	6	KV
Anode dissipation	W_a max	5	KW
Grid dissipation	W_g max	300	KW
Frequency	f max	100	MC/S

CAPACITANCES

Input	C_i	23.3	pF
Output	C_o	3.0	pF
Grid to anode	$C_{g/a}$	17.5	pF

COOLING

Anode: by forced air 850 m³/hour

Buld: by forced air 25 m³/hour

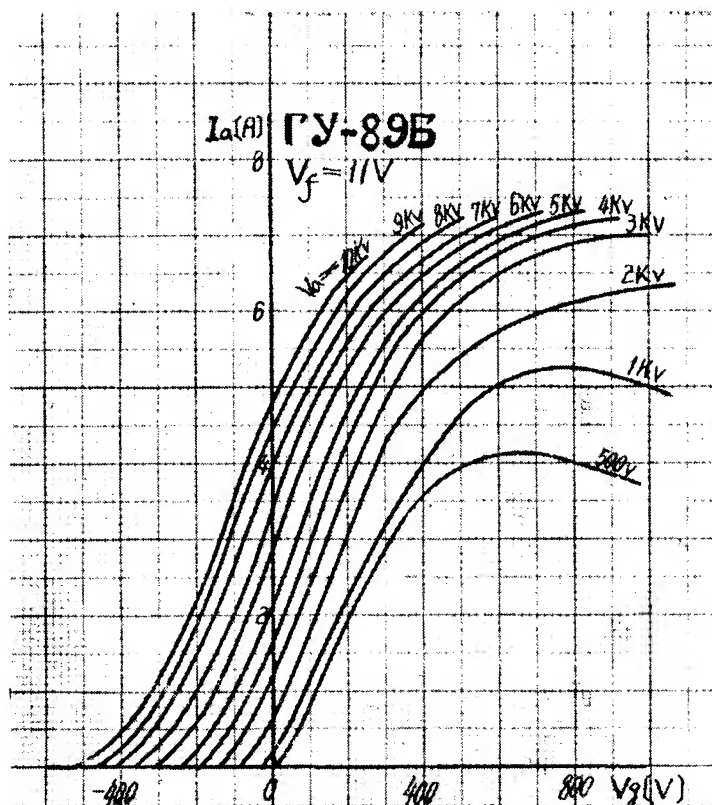
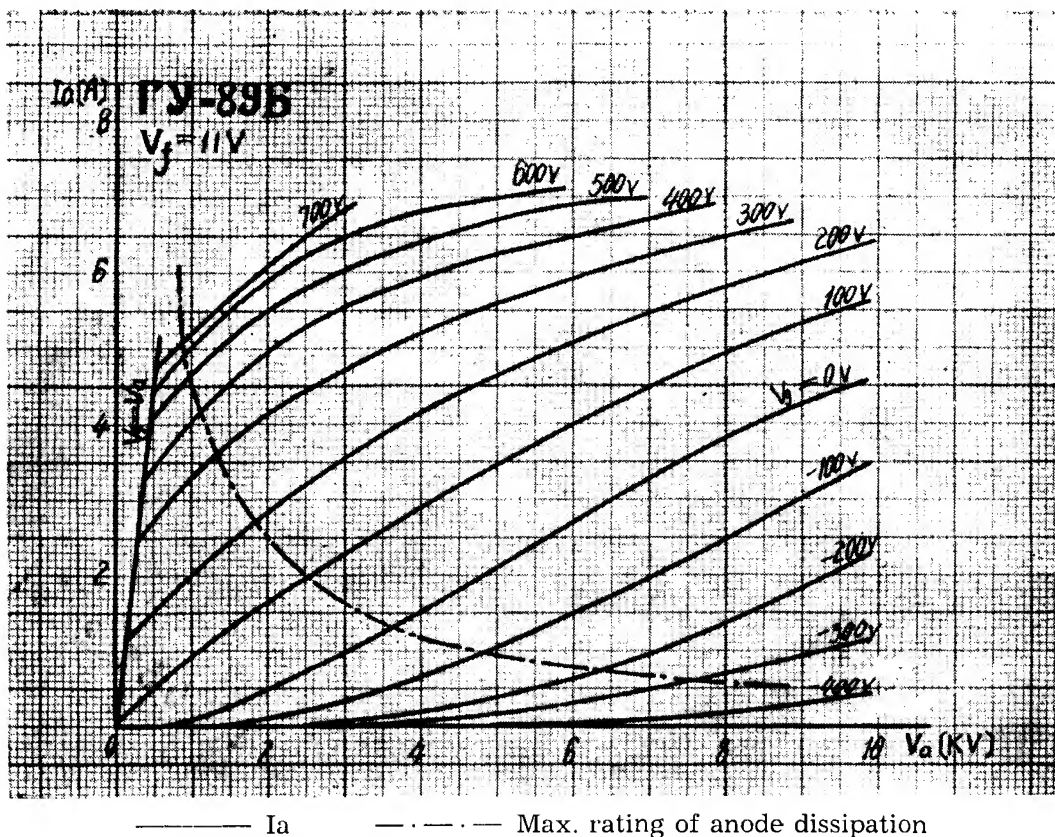
Weight: 1.7 kgs. (max.)

Mouting: vertical, anode down

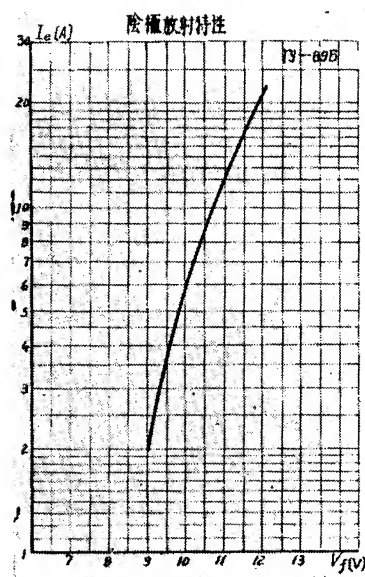
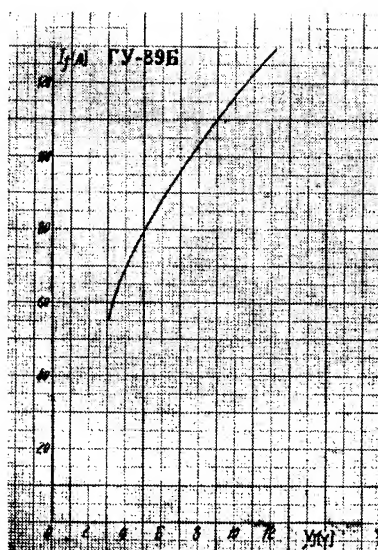
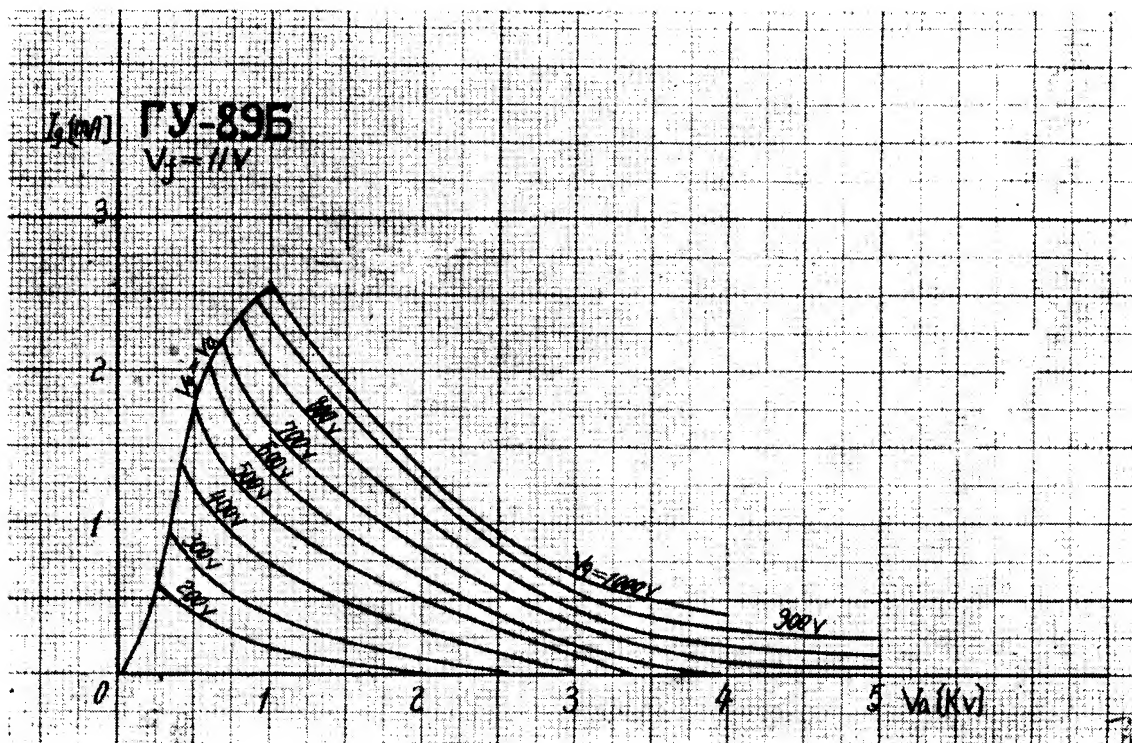


PEKING ELECTRON TUBES

ГУ-89Б



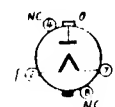
ГУ-89Б



HALF-WAVE RECTIFIER VU-IIID

DESCRIPTION

The octal type PEKING, VU-IIID is a high vacuum half-wave rectifier with directly heated oxide filament, designed for use as high-tension power supply in a.c. main operated equipment.



FILAMENT

Filament voltage	V_f	4	V
Filament current	I_f	1.1—1.5	A

CHARACTERISTICS

Anode voltage	V_a	160	V
Anode current	I_a	> 80	mA

OPERATING CONDITIONS

R.M.S. anode supply voltage	$V_{a\sim}$	5000	V
Load resistor	R_l	100	K Ω
Filter capacitor	C_f	1	μF
D.C. output current	I_l	> 50	mA

PEKING ELECTRON TUBES



VU-IIIID HALF-WAVE RECTIFIER

MAXIMUM RATINGS

Filament voltage	V_f	3.8—4.2	V
Peak inverse anode voltage	$V_{pk \text{ max}}$	12	KV
Peak anode current	$I_{pk \text{ max}}$	0.4	A
Anode dissipation	$W_a \text{ max}$	12	W

Base: Octal

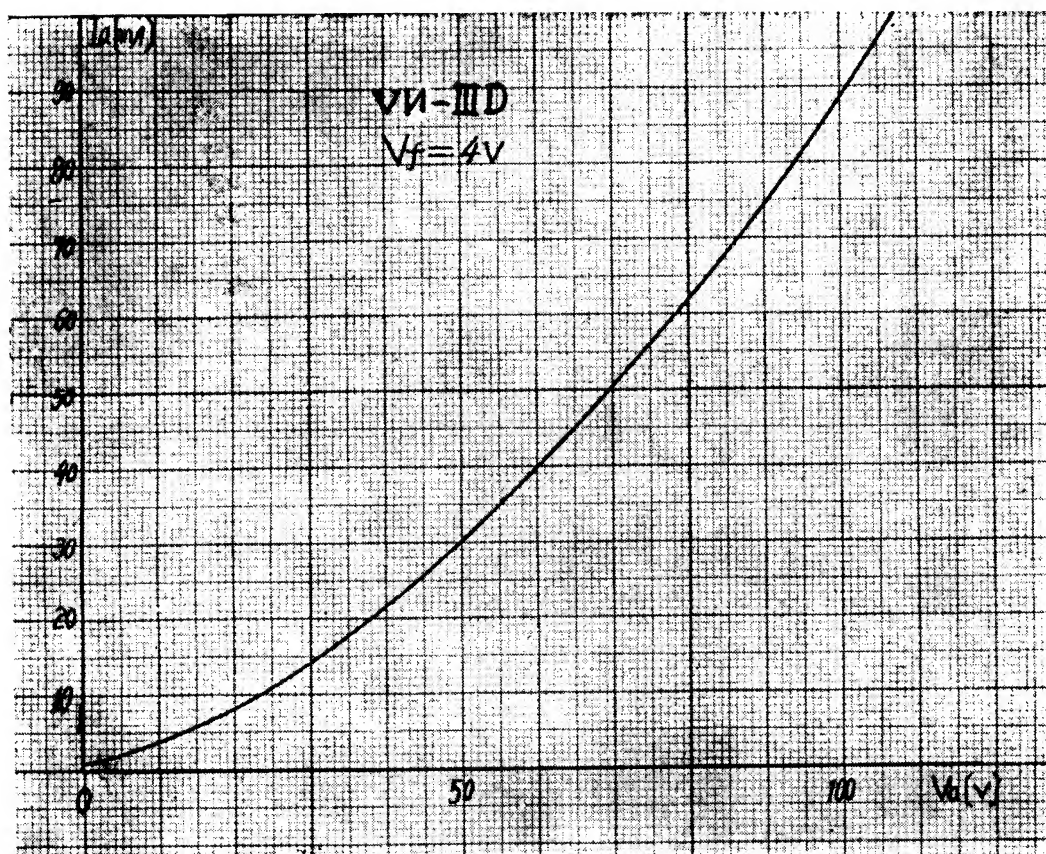
Weight: 100 g. (max.)

Mounting: Any.



PEKING ELECTRON TUBES

VU-III D

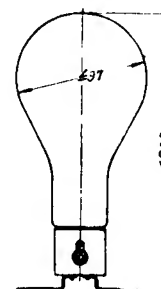
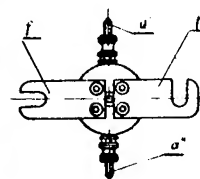
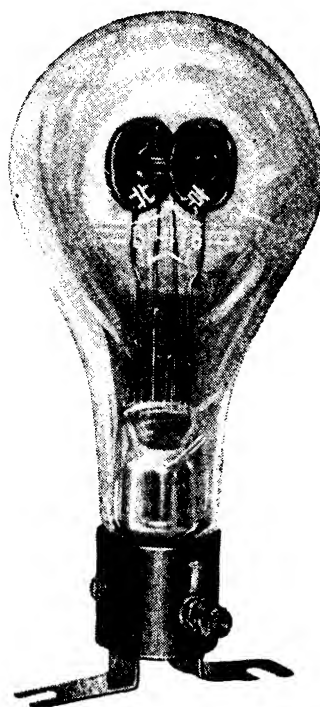


LOW-VOLTAGE FULL-WAVE RECTIFIER

БГ-176

DESCRIPTION

The PEKING type БГ-176 is a low-voltage full-wave rectifier with argon-gas filling and a directly heated thoriated molybdenum filament. Specially designed for chargers of storage batteries or alkaline cells.



FILAMENT

Filament voltage	V_f	2.5	V
Filament current	I_f	11	A

CHARACTERISTICS

Peak inverse anode voltage	$V_{pk \text{ max}}$	150	V
Peak anode current	$I_{pk \text{ max}}$	9	A
D.C. output current	$I_l \text{ max}$	6	A
Arc voltage (Anode voltage drop)	$V_{arc \text{ max}}$	14	V
Ignition voltage	V_{ig}	< 20	V
Ambient temperature range	-50°C to + 50°C		
Filament heating-up time	$t_f \text{ min}$	30	Sec.

Base: Special base (see drawing)

Weight: 200 g. (max.)

Mounting: Vertical, base down.

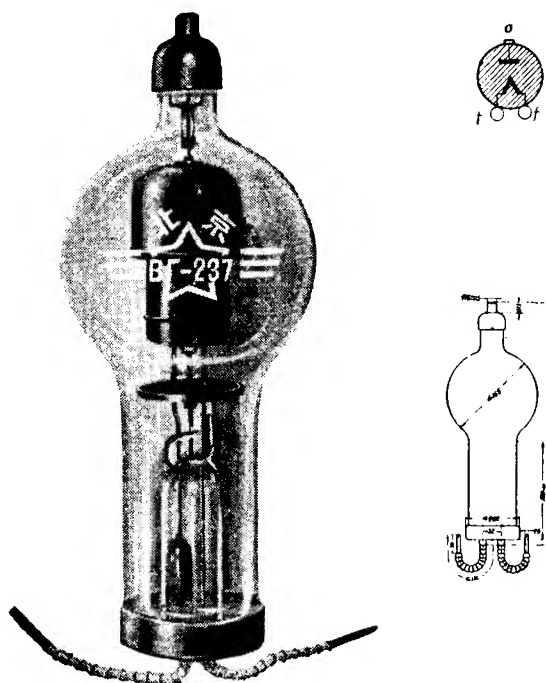
PEKING ELECTRON TUBES



MERCURY-VAPOUR RECTIFIER BГ-237

DESCRIPTION

THE PEKING type BГ-237 is a half-wave, mercury-vapour hot-cathode rectifier tube for high-peak inverse voltage. It can be used in high-tension rectifiers for transmitters, h.f. industrial generators and other purposes.



FILAMENT

Filament voltage	V_f	5	V
Filament current	I_f	≤ 22	A

CHARACTERISTICS

Peak inverse anode voltage	V_{pk}	10	KV
Peak anod current	I_{pk}	10	A
Arc voltage (Anode voltage drop)	V_{arc}	16	V
Ambient temperature range	$+15^{\circ}\text{C}$ to $+35^{\circ}\text{C}$		

PEKING ELECTRON TUBES



BΓ-237 MERCURY-VAPOUR RECTIFIER

MAXIMUM RATINGS

Filament voltage	V_f	4.75—5.5	V
Peak inverse anode voltage	$V_{pk \text{ max}}$	10	KV
Peak anode current	$I_{pk \text{ max}}$	10	A
Rectified current (average value)	I_l	3.5	A
Frequency	$f \text{ max}$	50	C/S
Filament heating-up time	$t_f \text{ max}$	5	minutes

Note: After shipment or transit the tube must be pre-heated not less than 90 minutes per month.

Weight: 1.1 kgs. (max.)

Mounting: Vertical, anode terminal up.



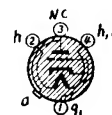
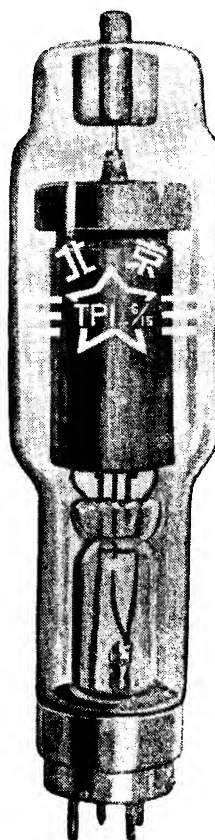
PEKING ELECTRON TUBES

THYRATRON

TP1-6/15

DESCRIPTION

The PEKING type TP1-6/15 is a thyatron with mercury-vapour filling, for a peak inverse voltage of 15 KV and a d.c. current of 6.5A, and is designed for use in grid-controlled rectifier applications.



FILAMENT

Filament voltage	V_f	5	V
Filament current	I_f	< 23	A

CHARACTERISTICS and Limiting Value

Peak anode voltage	$V_{pk \text{ max}}$	15	KV
Peak anode current	$I_{pk \text{ max}}$	20	A
Anode current (average value)	$I_a \text{ max}$	6.5	A
Grid voltage	$V_g \text{ min}$	-100	V
Grid circuit resistor	R_g	1 to 5	$K\Omega$

PEKING ELECTRON TUBES



TP1-6/15

THYRATRON

Filament voltage	V _f	4.75—5.95	V
Frequency	f max	50	C/S
Filament heating time	t _f min	15	minutes
Ambient temperature range		+15°C to + 35°C	

Note: After shipment or transit the tube must be pre-heated not less than 60 minutes per month.

Base: Special 4-pin (see drawing)

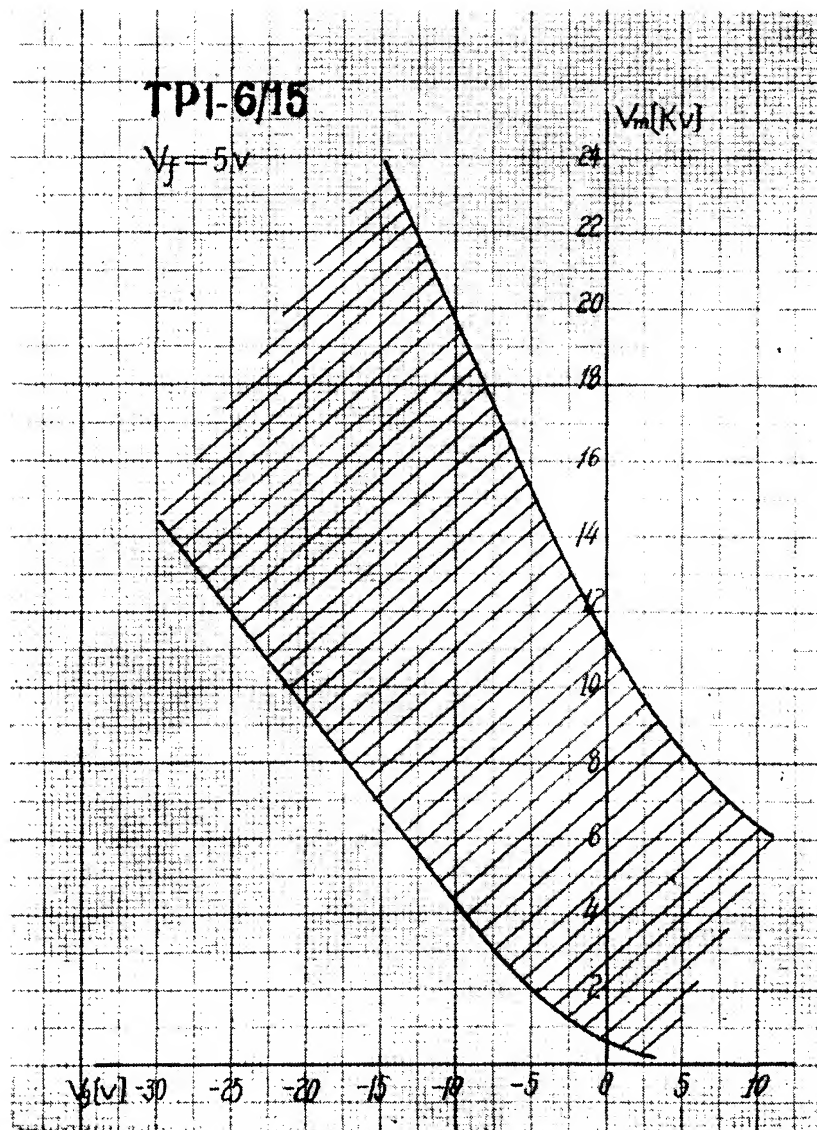
Weight: 1 kgs.

Mounting: Vertical, base down

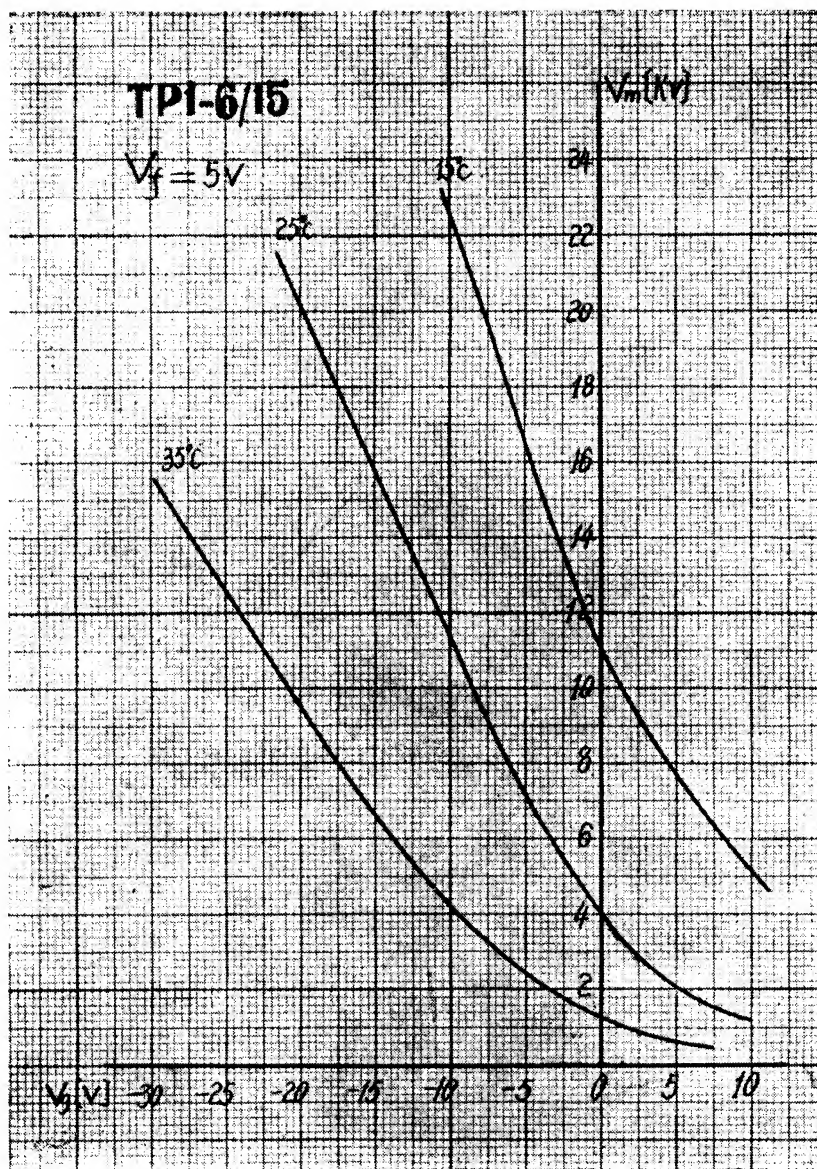


PEKING ELECTRON TUBES

TP1-6/15



TP1-6/15

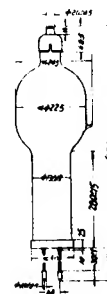
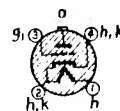
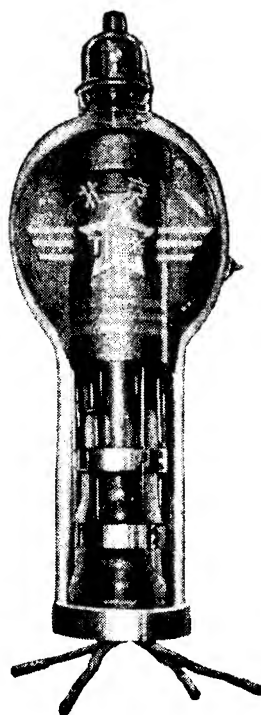


THYRATRON

TP1-40/15

DESCRIPTION

The PEKING type TP1-40/15 is a thyatron with mercury-vapour filling, for a peak inverse voltage of 15 KV and a d.c. current of 40 A, and is designed for use in grid-controlled rectifier applications.



FILAMENT

Filament voltage	V_f	5	V
Filament current	I_f	68	A

CHARACTERISTICS and Limiting Values

Peak anode voltage	$V_{pk \text{ max}}$	15	KV
Peak anode current	$I_{pk \text{ max}}$	120	A
Anode current (average value)	$I_a \text{ max}$	40	A
Grid voltage	$V_g \text{ min}$	—100	V
Grid circuit resistor	R_g	1 to 5	K Ω
Filament voltage	V_f	4.75—5.25	V
Filament heating time	$t_f \text{ min}$	30	minutes

PEKING ELECTRON TUBES



TP1-40/15

THYRATRON

Frequency	f max	50	C/S
Ambient temperature range	+ 15°C to + 35°C		

Note: After shipment or transit the tube must be pre-heated not less than 120 minutes per month.

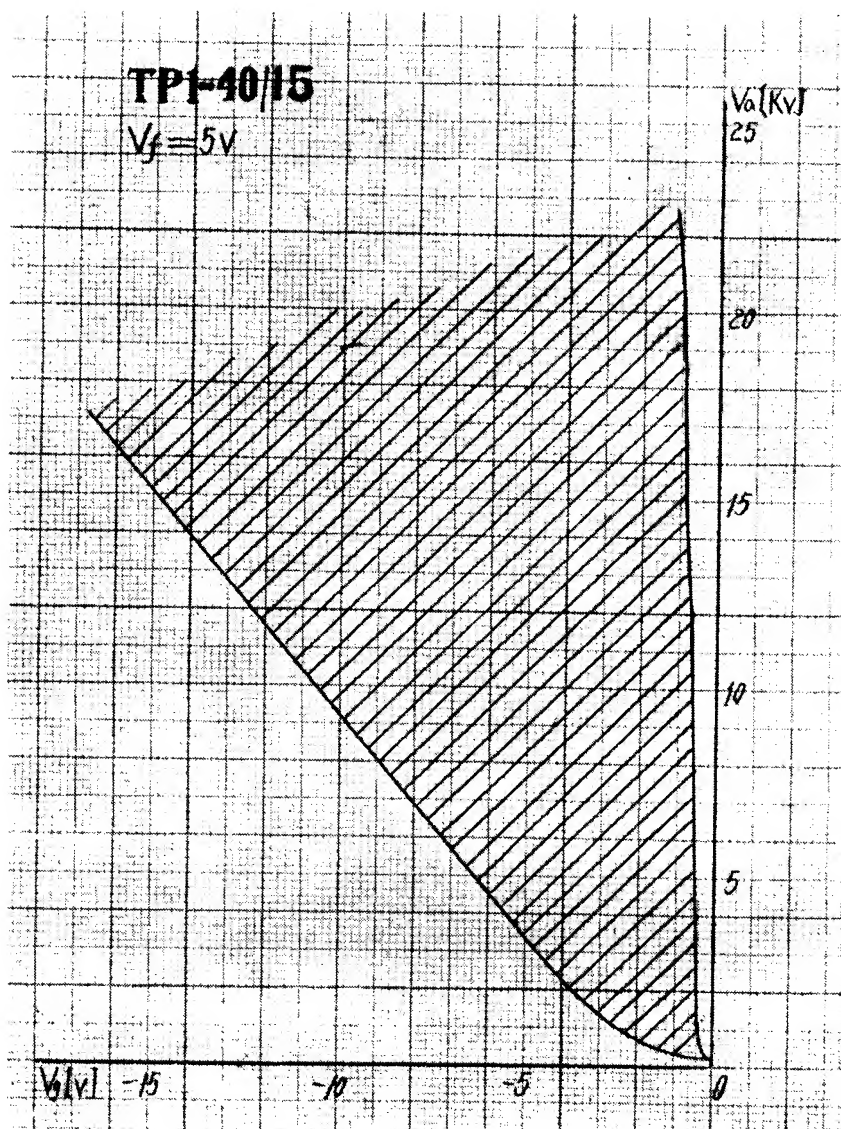
Weight: 4 kgs.

Mounting: Vertical, anode terminal up.

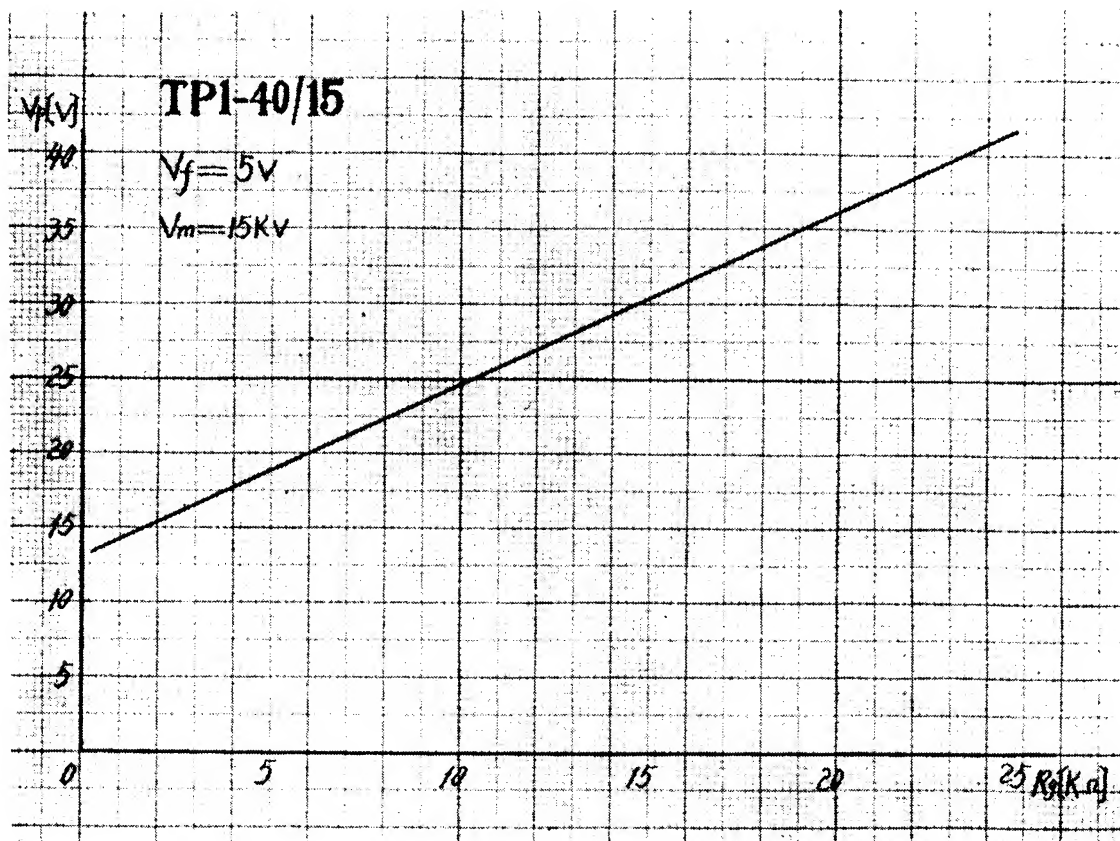


PEKING ELECTRON TUBES

TP1-40/15



TP1-40/15

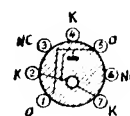


VOLTAGE REGULATOR

СГ1П

DESCRIPTION

The miniature tube PE-KING СГ1П is a inert-gas-filled two-electrode tube, cold cathode glow-discharge type, intended for use as a voltage regulator.



CHARACTERISTICS

Starting voltage	Vst	<180	V
Operating voltage	Vop	150	V
Regulation (5 to 30 mA)	Vrg	<4	V
Noise (effective value)	Vni	<5	mV

LIMITING VALUES

Max. operating current	Iop max	40	mA
Min. operating current	Iop min	5	mA
Ambient temperature range		-60°C to + 90°C	

Base: Miniature 7 pin

Weight: 14 g. (max.)

Mounting: Any

PEKING ELECTRON TUBES



INTERCHANGEABILITY LIST

The following list indicates PEKING TYPE equivalent or similar to various other maker.

TYPE	PRODUCER	PEKING TYPE	NOTES
DAF 91	Mullard, Phillips, Telefunken	1B2Π	N
DAF 96	Mullard, Philips, R.F.T., Telefunken	1B2Π	D
DAF 191	R.F.T.	1B2Π	N
DF 91	Mullard, Philips, Telefunken	1K2Π	N
DF 96	Mullard, Philips, R.F.T., Telefunken	1K2Π	D
DF 191	R.F.T.	1K2Π	N
DK 91	Mullard, Philips, Telefunken	1A2Π	N
DK 96	Mullard, Philips, R.F.T., Telefunken	1A2Π	D
DK 192	R.F.T.	1A2Π	N
DL 92	Mullard, Philips, Telefunken	2Π2Π	N
DL 96	Mullard, Philips, R.F.T., Telefunken	2Π2Π	D
DL 192	R.F.T.	2Π2Π	N
EAA 91	Philips, R.F.T., Telefunken	6X2Π	D
EB 91	Mullard, Philips	6X2Π	D
ECC 83	Mullard, Philips, R.F.T., Telefunken, Tungsram	6H2Π	D
EF 93	Mullard, Philips	6K4Π	D
EF 95	Mullard, Philips, R.F.T.	6Ж1Π	D
EK 90	Mullard	6A2Π	D
EL 90	Mullard	6Π1Π	B
EM 80	Mullard, Philips, Telefunken Tungsram	6E1Π	D
EZ 90	Mullard	6Π4Π	C
OA 2	Philips, R.C.A.	CT1Π	D
OS 450	Tungsram	ΓY-80	D
P 50/2	R.F.T.	ΓY-50	D
QQE 04/20	Philips	ΓY-32	
RD 5 XF	Tesla	ΓY-89B	D
RD 5 YF	Tesla	ΓY-89A	D
RS 384	Telefunken	ΓY-80	D
1AB6	Philips, R.C.A., Telefunken	1A2Π	D
1AF33	Tesla	1B2Π	D
1AF34	Tesla	1B2Π	D
1AH5	Philips, R.C.A., Telefunken	1B2Π	D
1AJ5	Philips, R.C.A., Telefunken	1K2Π	D
1F33	Tesla	1K2Π	D
1F34	Tesla	1K2Π	D
1H33	Tesla	1A2Π	D
1H34	Tesla	1A2Π	D
1K22	Toshiba	2Π2C	B
1L33	Tesla	2Π2Π	D
1L34	Tesla	2Π2Π	D

TYPE	PRODUCER	PEKING TYPE	NOTES
1R5	Philips, R.C.A. Tungfram	1A2Π	N
1R5T	Tungfram	1A2Π	D
1S5	Philips, R.C.A. Tungfram	1B2Π	N
1S5T	Tungfram	1B2Π	D
1T4	Philips, R.C.A. Tungfram	1K2Π	N
1T4T	Tungfram	1K2Π	D
2B32	Toshiba, N.E.C.	ГY-32	D
2X2A	R.C.A.	2Π2C	B
3C4	Philips, R.C.A., Telefunken	2Π2Π	D
3S4	Philips, R.C.A. Tungfram	2Π2Π	N
3S4T	Tungfram	2Π2Π	D
5P7O	Toshiba	ГY-80	N
5SO45T	Elektroimpex	ГY-80	D
6AK5	Philips, R.C.A. Tungfram	6Ж1Π	D
6AL5	Philips R.C.A., Telefunken Tungfram	6X2Π	D
6AQ5	Philips R.C.A., Telefunken Tungfram	6Π1Π	B
6B32	Tesla	6X2Π	D
6BA6	Philips R.C.A., Telefunken Tungfram	6K4Π	D
6BE6	Philips R.C.A., Telefunken Tungfram	6A2Π	D
6BR5	Philips, R.C.A., Telefunken	6E1Π	D
6F31	Tesla	6K4Π	D
6F32	Tesla	6Ж1Π	D
6H31	Tesla	6A2Π	D
6L31	Tesla	6Π1Π	B
6X4	Philips, R.C.A. Tungfram	6Π4Π	C
6Z31	Tesla	6Π4Π	C
12AX7	R.C.A.	6Π2Π	D
150C2	Mullard	CG1Π	D
832-A	Philips, R.C.A.	ГY-32	D
889-A	R.C.A.	ГY-89A	D
889R-A	R.C.A.	ГY-89B	D

Notes: D — Direct equivalents.

C — Direct equivalents but connection of
electrodes differences.

B — Direct equivalents but base differences.

N — Near equivalents.

中國儀器進口公司
CHINA NATIONAL INSTRUMENTS IMPORT CORPORATION
(IMPORTERS & EXPORTERS)

CHINA NATIONAL INSTRUMENTS IMPORT CORPORATION

HEAD OFFICE:

Er-Li-Kou, Hsi Chiao, Peking, China.

Cable Address: "INSTRIMPOT"

BRANCH OFFICES:

SHANGHAI: 27 Chungshan Road (E.1).

Cable Address: "INSTRIMP"

TIENTSIN: 171 Kien Shieh Road.

Cable Address: "INSTRIMP"

CANTON: 25 Tai Ping Road, S.

Cable Address: "INSTRIMP"